



Preliminary Ignition Investigation Report

Ignition Database Index:	20241550
Electric Incident Investigation (EII) Number:	N/A
Incident Name:	Hawk
PG&E Facility Ignition?	Yes
CPUC Reportable Ignition?	Yes
Date & Time of Incident:	October 25, 2024 at approximately 1444 hours
Street Address:	Near Chicken Hawk Road and Michigan Bluff Road
City:	Foresthill
County:	Placer
Latitude/Longitude:	39.046612, -120.741229
State Responsibility Area (SRA) / Local Responsibility Area (LRA) / Federal Responsibility Area (FRA)	SRA
PG&E Division:	Sierra
High Fire Threat District (HFTD):	Tier 3
High Fire Risk Area (HFRA):	Yes
EPSS Buffer:	No
Fire Index Area (FIA):	330
Fire Potential Index (FPI) Rating: FIA	R3
Fire Potential Index (FPI) Rating: Circuit	R3
Was there a PSPS event at the time of ignition?	No
Suspected Initiating Event:	Contact – 3 rd Party
Failure Driver:	Contact from Object
Failure Sub-driver:	Contact – Vegetation
Circuit:	Foresthill 1101, 15218-1101
Circuit Protection Zone:	Foresthill 1101 LR 37238
Nominal Voltage:	12kV
Pole SAP Equipment ID:	103847387
Subject to PRC 4292 Veg Pole Clearance:	No
PG&E Equipment associated with ignition:	2 Aluminum Conductor Steel Reinforced (ACSR)
EPSS enabled at time of ignition?	Yes
Fault Type:	Force Out
Wire Down (Primary)?	No
Lead Agency/Agency Having Jurisdiction:	CAL FIRE
Fire Size:	100 x 100-foot
FAS Field Remarks:	Arrived on scene and fire lead said lines were hot and tree on phase. Called DO and killed the line at LR 37238. Tree was fresh cut and landed on hot phase per fire inspector. Fire was 100ft x 100ft

	roughly. Wire was not damaged nor were adjacent structures. Did not see any markings on tree for removal by our contractors. Tree was roughly 27 feet from line at stump. Removed tree from line. reported to DO. Energized the line with good load at LR per DO. Filled out IR & Fire Damage Data Sheet
HAWC Summary:	Resources responded to a vegetation fire, the Hawk Incident. It was located at Chicken Hawk Road and Michigan Bluff Road in Placer County. This is a Tier 3 area. The fire was listed as forward progress stopped. The fire size was last listed as 0.21 acres. There was an outage associated with this incident. The outage was on the Foresthill 1101 circuit with 102 customers impacted. The OIS number(s) was/were – 2604019. The closest circuit was the Foresthill 1101, it was an EPSS circuit. An Everbridge was sent. Notifications were made to: HAWC Supervisor and PSS.
Injuries / Fatalities / Property Damage / Media Attention:	No Injuries/Fatalities/Property Damage/Media Attention
Weather Conditions:	At 1440 hours near the Incident Location: Temperature: 73.5°F Relative Humidity: 24% Wind Speed: 5.2 MPH Wind Gust: 11.1 MPH out of the south-southwest
Red Flag Warning (RFW) / High Wind Warning (HWW):	RFW – No HWW – No
911 Standby Relief Time:	40 minutes
OIS #:	2604019
ILIS #:	24-0128032
FAS #:	T006535188 T006535222 - Cancelled
TOTL #:	N/A
Assigned Attorney:	N/A
Ignition Investigator & Phone:	

Executive Summary

On October 25, 2024 at approximately 1442 hours, PG&E received a 911 Standby call from CAL FIRE seeking assistance with a potential wire down and a vegetation fire. Shortly after, PG&E dispatched a troubleshooter to patrol an unincorporated area of Placer County (Tier 3 HFTD) near Chicken Hawk Road and Michigan Bluff Road (see Figure 1). The troubleshooter arrived onsite at 1521 hours to the EPSS enabled, two-phase primary overhead segment of the Foresthill 1101 12kV distribution circuit between Pole SAP ID 103847387 (Pole #1) (source side) and 100076338 (Pole #2) (loadside) (Incident Location) and observed a tree leaning mid-span on energized lines with an extinguished burn on the ground measuring approximately 100 x 100-feet in size (see Figure 2). The troubleshooter contacted the Distribution Operator (DO) to manually have Line Recloser (LR) 37238 opened to sectionalize and de-energize the Incident Location (no associated outage or SmartMeter™ alarms were received prior) so that the tree could be safely removed. The CAL FIRE Incident Commander reported to the troubleshooter that two individuals (not on behalf of PG&E or contractors with PG&E) were cutting down trees and one of the trees fell towards the direction of the powerlines and ignited the ground below. The troubleshooter did not observe any damages to the nearby poles, equipment or the incident span and no corrective notifications were created. All customers were restored by 1634 hours after the tree had been safely removed.

PG&E Meteorology data pulled from the MesoWest observation site located approximately 0.6 miles southeast of the Incident Location indicates a fair, dry and seasonably warm day with temperatures at 73.5°F and relative humidity at 24%. Winds registered up to 5.2 Miles Per Hour (MPH) with gusts up to 11.1 MPH from the south-southwest. The strongest wind speed recorded was up to 12.9 MPH at 1430 hours. There were no Red Flag or High Wind Warnings nor did this ignition occur during a Public Safety Shutoff (PSPS) event.

An Ignitions Investigator conducted a follow up site visit on October 30, 2024. The Incident Location was found with a litter of tree debris piled on the ground from multiple tree sources that had been cut. The Ignitions Investigator was able to locate an incense cedar (*Calocedrus decurrens*, Incident Tree) that was cut and had fallen towards the direction of PG&E's conductors. In viewing the stump of the Incident Tree in conjunction with the base of the cut of the fallen section, the Ignitions Investigator observed steep angled cuts that did not extend into the center or within the majority of the Incident Tree's diameter (see Figure 3 and 4). Within a few feet from the Incident Tree, there was a large black oak (*Quercus kelloggii*) that was also cut down. Both the stump and base of the fallen section of the black oak showed evidence of cuts that were not extended into the center or within the majority of the tree diameter (see Figure 5). The Ignitions Investigator was uncertain if the Incident Tree was cut and accidentally felled towards the conductors as a singular event or if the Incident Tree's contact with the powerlines was from a chain of events that involved cutting and felling the black oak initially via a *domino effect*. However, it does appear that the technique involved in wedging/cutting the trees did not align with proper felling practices. This likely resulted in the tree falling in an unintended direction. In viewing the Incident Span, the Ignitions Investigator noted visible damage to the conductor (see Figure 6) (See Potential Next Steps / Associated CAP Items section).

PG&E's Public Safety Specialist team advised the Vegetation Management (VM) team that the two individuals were issued citations by CAL FIRE. Although, the VM team did not investigate the history or the health of the

incident tree (given it is 3rd Party in cause), a total of 12 trees were identified by VM for removal near the Incident Location due to fire damage.¹

System Protection Analysis

The Foresthill 1101 is located within a Tier 3 High Fire Threat District (HFTD) and High Fire Risk Area (HFRA). PG&E's Distribution Asset Planning team confirmed that Enhanced Powerline Safety Settings (EPSS) were enabled for the Foresthill 1101 distribution circuit and its protective devices. However, no devices operated automatically. Line Recloser (LR) 37238, the device tasked with the zone of protection, was forced open by the DO after the troubleshooter confirmed a tree was leaning on a hot line. To note, the next protective device LR 1820 did not capture any event data to determine if it should have operated. No partial voltage alarms were received for this suspected high impedance line-to-line fault.

Below are the protective devices and their respective settings:

- LR 37238: Alt #1 with Sensitive Ground Fault (SGF) enabled.
- LR 1820: Mode 3 with both Down Conductor Detection (DCD) and SGF enabled.

Ignition Impact

The ignition event on October 25, 2024 (Hawk Fire) resulted in a fire on the timber litter fuel bed measuring approximately 100 x 100-feet in size near the perimeter of the burn scar of the 2022 Mosquito Fire. The associated outage from the time required to remove the tree from the powerline lasted 61 minutes and affected a total of 102 customers. There were no reported injuries, fatalities, property damages or significant media attention from this event.

Sequence of Events

October 25, 2024

- 1436 Hours: IRWIN time.
- 1442 Hours: 911 Standby call from CAL FIRE regarding vegetation fire. No partial voltage (PV) alarms received.
- 1444 Hours: Troubleshooter dispatched.
- 1521 Hours: Troubleshooter arrives onsite.
- 1533 Hours: LR 37238 remotely opened by the DO to de-energize line for tree removal.
- 1634 Hours: LR 37238 closed, all customers restored.

Corrective Notification Associated with Ignition

There were no corrective notifications created as a result of this ignition event. However, during a site visit on October 30, 2024, an Ignitions Investigator identified visible damage on the conductor where the tree had made contact (See Potential Next Steps / Associated CAP Items section).

¹ Trees listed for removal can be located within the shared folder under *20241550 Post Ignition Vegetation Management Tag Work*.

Pending Work

Type	Number	Description	Priority	Date Identified	Due Date
EC Notification	129027329	Install/replace missing high voltage sign.	F	June 6, 2024	June 6, 2029
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	103847387 (Pole #1)	
Info / Inspection	Most Recent Date	Findings
Install Date:	September 1, 2017	40-foot, Class 3, Wood
Inspection:	May 17, 2024	Aerial Inspection identified no compelling issues.
	July 13, 2022	GO165 Inspection identified no vegetation or equipment issues/risks.
	April 28, 2021	GO165 Inspection identified no vegetation or equipment issues/risks.
Patrol:	August 13, 2024	Patrol identified no vegetation or equipment issues/risks.
	June 29, 2023	Patrol identified no vegetation or equipment issues/risks.
Corrective History:	June 6, 2024	Priority "F" EC tag (#129027329). See Pending Work section above for details.
	March 17, 2020	Priority "A" EC tag (#118716440) created to replace damaged pole from downed tree. Pole top was reframed.
Aerial Inspection Records:	October 21, 2019	Aerial photography of pole within Sharper Shape.
		No aerial photography within iHawk as of yet.
VM Inspection:	August 6, 2024	No work prescribed.
EVM Inspection:	N/A	
Equipment Test:	N/A	
Pole Intrusive Test:	N/A	Pole installed in 2017.
WSIP Inspection:	March 11, 2019	WSIP Inspection identified no compelling abnormal conditions for the pole, equipment and its associated spans. Six auto splices were noted north of pole.

Load Side Structure	100076338 (Pole #2)	
Info / Inspection	Most Recent Date	Findings
Install Date:	January 1, 1947	35-foot, Class 5, Douglas Fir
Inspection:	July 11, 2024	Aerial Inspection identified moderate decay on pole.
	May 17, 2024	Aerial Inspection identified split from pole top down through hardware.
	July 13, 2022	GO165 Inspection identified no vegetation or equipment issues/risks.
	April 27, 2021	GO165 Inspection identified no vegetation or equipment issues/risks.
Patrol:	August 13, 2024	Patrol identified no vegetation or equipment issues/risks.
	June 29, 2023	Patrol identified no vegetation or equipment issues/risks.
Corrective History:	March 11, 2019	Priority "E" EC tag (#116712698) to replace decaying crossarm and install high voltage sign.
Aerial Inspection Records:	October 21, 2019	Aerial photography of pole within Sharper Shape.
		No aerial photography within iHawk as of yet.
VM Inspection:	August 6, 2024	No work prescribed.
EVM Inspection:	N/A	
Equipment Test:	N/A	
Pole Intrusive Test:	September 6, 2016	Record indicates "no pole."
	December 12, 2006	Passing results with the following: Fair pole top and pole bottom conditions. Wood strength testing at 100%.
WSIP Inspection:	March 11, 2019	WSIP Inspection identified decaying crossarm. EC tag (#116712698) created. See Corrective History above for details.

*Incident Location: Between Pole SAP ID 103847387 and 100076338

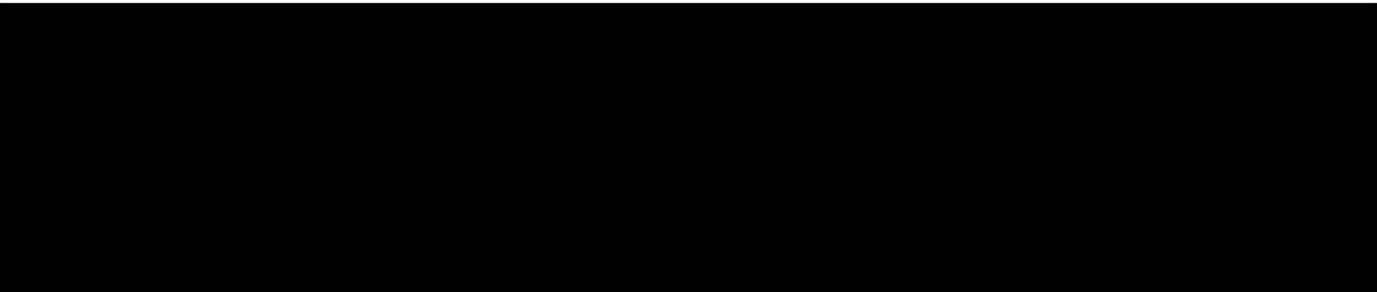
Hazard Barrier Analysis:

Hazard	Third Party Contact	Sub-Hazard	Vegetation Contact
Target	Third Party Cutting Trees into Powerlines and Starting an Ignition.		
Barrier	Expected vs. Observed Performance	Why did the barrier not prevent the ignition event? (See ICF Codes)	Opportunity
Barriers that were Assessed as Opportunities			
Covered Conductor on Primary Conductors	Expected Performance: Covered conductor should lower the risk of a wildfire. Observed Performance: Barrier did not exist	A4B2C1D2 – Program limited to certain conductors	Covered conductor may have reduced ignition impact.
Gridscope	Expected Performance: Detect fault conditions such as line break, pole tilt, wire-to-wire contact, or arcing and dispatch a troubleshooter to the fault location; Observed Performance: Barrier did not exist	N/A	Gridscope did not exist for incident span but could have added further detection capabilities.

Potential Next Steps / Associated CAP Items:

- CAP [129894216](#): Created to have Maintenance and Construction review incident span for potential repairs.

Single Line Diagram



LEGEND			
	Substation		Fuse
	Line Recloser		Area of Interest

This report is preliminary and based on available information as of **October 30, 2024**; event data is subject to change based upon subsequently discovered information.

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Internal

Photos and Diagrams of Events

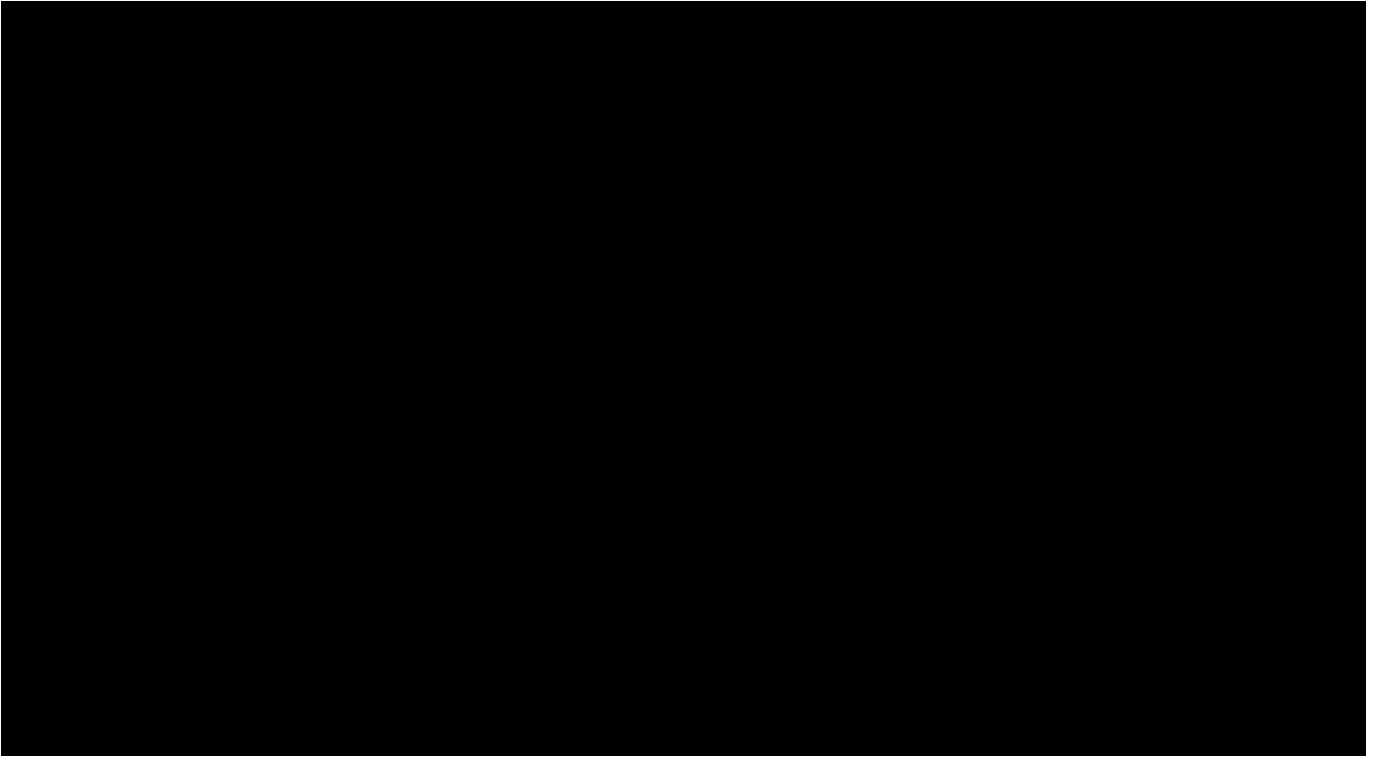


Figure 1 – Google Earth view of the incident span on the Foresthill 1101. The approximate location of the incident tree (marked with a white 'X') and of the fire footprint (marked with a red box) are shown.



Figure 2 – View of incident tree facing northwest towards Pole SAP ID 103847387 (left) and facing southeast towards Pole SAP ID 100076338 (right) on October 25, 2024. Photos taken by the troubleshooter.



Figure 3 – Incident Location facing towards conductor on October 30, 2024. Photo taken by Ignitions Investigator.



Figure 4 – Incident tree shown with steep angled cuts on the failed top end (left) and the stump (right) on October 30, 2024. Photos taken by Ignitions Investigator.



Figure 5 – Stump of nearby black oak with steep angled cuts on October 30, 2024. Photos taken by Ignitions Investigator.

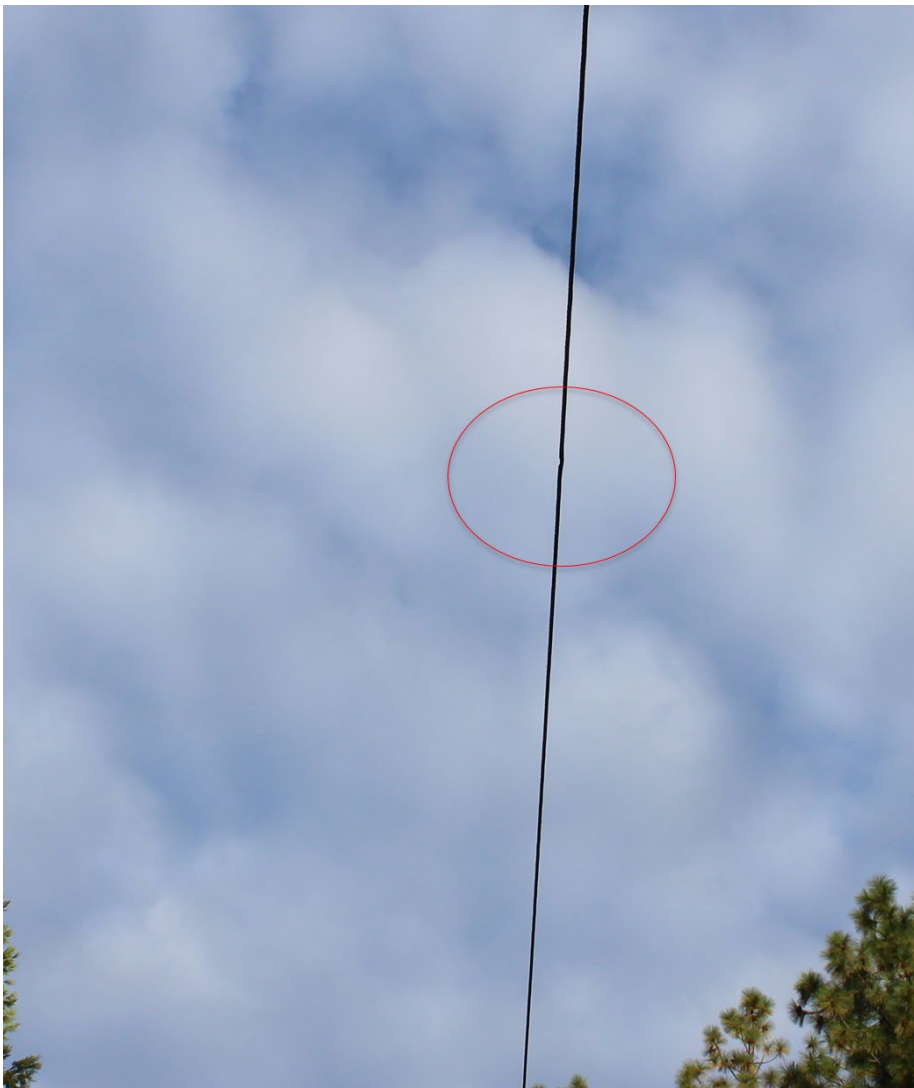


Figure 6 – Damage to the conductor on October 30, 2024. Photo taken by Ignitions Investigator.

Attachments

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



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