



Preliminary Ignition Investigation Report

Ignition Database Index:	20241108
Electric Incident Investigation (EII) Number:	N/A
Incident Name:	Ziggy - 08 August 2024
PG&E Facility Ignition?	Yes
CPUC Reportable Ignition?	Yes
Date & Time of Incident:	August 08, 2024 @ 1311 hours
Street Address:	In the vicinity of [REDACTED]
City:	Diamond Springs
County:	El Dorado
Latitude/Longitude:	[REDACTED]
State Responsibility Area (SRA) / Local Responsibility Area (LRA) / Federal Responsibility Area (FRA)	State Responsibility Area (SRA)
PG&E Division:	Sierra
High Fire Threat District (HFTD):	Tier 2
High Fire Risk Area (HFRA):	Yes
EPSS Buffer:	No
Fire Index Area (FIA):	340
Fire Potential Index (FPI) Rating: FIA	R5
Fire Potential Index (FPI) Rating: Circuit	R5
Was there a PSPS event at the time of ignition?	No
Suspected Initiating Event:	Vegetation
Failure Driver:	Contact from object
Failure Sub-driver:	Contact – Vegetation
Circuit:	Diamond Springs 1106
Circuit Protection Zone:	Diamond Springs 1106930190
Nominal Voltage:	12kV – Circuit 0.240V – Secondary service drop (Incident Location)
Pole SAP Equipment ID:	SAP Pole ID: 101404242
Subject to PRC 4292 Veg Pole Clearance:	No
PG&E Equipment associated with ignition:	single-phase secondary service drop
EPSS enabled at time of ignition?	No
Fault Type:	Line to ground
Wire Down (Primary)?	No (service)
Lead Agency/Agency Having Jurisdiction:	CAL-FIRE
Fire Size:	0.1 acre (based on HAWC summary)

FAS Field Remarks:	fire. tree fell on svc.
HAWC Summary:	Resources responded to the Ziggy Incident located on Pleasant Valley Rd & Ziggy Rd, Diamond Springs regarding a report of a vegetation fire. This is a Tier 2 area and in the direct vicinity of the following assets: <ul style="list-style-type: none"> • Distribution: DIAMOND SPRINGS 1106 (EPSS Enabled) Incident Command arrived on scene and advised the fire consumed approximately (01) acres prior to declaring forward progress stopped. During the incident, I monitored OMT for reported outages with negative results. SIPT did not respond to this incident and there were no on-scene reports of any impact to PG&E assets. Everbridge messages and Incident Reports were not sent. Due to this incident not meeting guidance for ACTIVE status, it will remain INITIAL and closed barring any notable change in conditions.
Injuries / Fatalities / Property Damage / Media Attention:	No Injuries/No Fatalities/ /No Media Attention. The failed limb fell on the building and fire damaged the building; no claims have been received by PG&E as of September 18, 2024.
Weather Conditions:	It was a seasonably warm and dry day at 91.2°F @ 1310 hours on August 8, 2024, near the Incident Location.
Red Flag Warning (RFW) / High Wind Warning (HWW):	No/No
911 Standby Relief Time:	N/A
OIS #:	2537836
ILIS #:	24-0097297
FAS #:	T006470279
TOTL #:	N/A
Assigned Attorney:	N/A
Ignition Investigator & Phone:	

Executive Summary

On August 8, 2024, at 1313 hours, PG&E dispatched a troubleshooter in response to customer reports of an outage and fire in the vicinity of [REDACTED], Diamond Springs CA. The ignition occurred on a single-phase secondary overhead segment of the Diamond Springs 1106 12kV Distribution Circuit (see Figures 1 and 2), in a Tier 2 High Fire Threat District (HFTD), High Fire Risk Area (HFRA), State Responsibility Area (SRA), during Fire Potential Index (FPI) R5 conditions.

The Field Automation System (FAS) record states that the PG&E troubleshooter arrived on scene at approximately 1314 hours and observed a fire. The troubleshooter indicated that a tree branch fell onto the Secondary Service line conductor and onto the nearby building causing arcing and burned vegetation below (see Figures 3, 4, and 5).

The fire is listed as the "Ziggy" fire in the Hazard Awareness Wildfire Command (HAWC) fire activity report. The ensuing fire had spread to about 0.1 acres (based on the HAWC summary) in size and was suppressed by CAL FIRE on August 8, 2024 (see Figure 6).

The PG&E repair crew arrived onsite at 1745 hours to repair the broken service and to replace a broken secondary cross-arm on SAP Pole ID: 101404242, which was part of an open Priority E-Tag # 127258926, dated October 12, 2023. All work was completed on August 8, 2024.

Meteorology data pulled from the MesoWest weather observation site that was approximately 2.0 miles west of the Incident Location indicates that it was a seasonably warm and dry day at 91.2°F with a relative humidity of 16%. Winds registered 5.0 Miles Per Hour (MPH) with gusts up to 9.2 MPH out of the west-southwest at the approximate time of the incident. Relative humidity was as high as 41% at 0410 hours and as low as 14% at 1130 hours.

A post-incident investigation was performed by a Vegetation Management (VM) investigator on August 9, 2024, near the Incident Location. The VM investigator observed a large interior live oak tree limb had failed and fallen through a single customer service drop which in effect also broke a secondary cross-arm on SAP Pole ID: 101404242. The inspector also observed that the failed tree limb had an open cavity and minor rot in the compression side of the limb and specified that this failed limb would not have affected the primary distribution facilities.

An extent of condition (EOC) investigation was performed by the same VM investigator on August 9, 2024, and noted the same details as the post-incident investigation above. The VM investigator patrolled five spans in each direction and no additional trees were identified or needed to be worked during the inspection (see Figures 7, 8, 9, and 10).

A query into the VM database lists the last pre-inspection patrol of the area prior to the incident as being performed by VM's Second Patrol program and taking place on May 28, 2024.

The Incident Location is located within an SRA, and there is no record of any tree work being identified in the Tree Mortality (formerly known as CEMA) database. A proximity search was performed in the Enhanced Vegetation Management (EVM) database and no trees had been identified for work within a 1/8-mile radius of the coordinates provided for this incident.

System Protection Analysis

The Diamond Springs 1106 12kV Distribution Circuit was enabled with Enhanced Powerline Safety Settings (EPSS) at the time of the incident due to the Fire Potential Index (FPI) R5 conditions (expected wind speeds, relative humidity, and fuel moisture thresholds for the service area). However, the incident occurred on the secondary service drop voltage level which is incapable of being protected by EPSS

Ignition Impact

This ignition on August 8, 2024, resulted in a vegetation fire that was 0.1 acres (based on the HAWC summary) in size. The associated outage from this fire affected a total of two customers for a total of 454 customer minutes. PG&E is not aware of any injuries, fatalities, or media attention, associated with this ignition, however, the failed tree limb fell on a building and the fire damaged the building. No property damage claims have been received by PG&E as of September 18, 2024.

Sequence of Events

August 8, 2024

- 1311 hours: First event - First No Light (FNL) – customer calling in on an outage and fire (two customers affected by the outage).
- 1313 hours: Troubleshooter dispatched (Per FAS Record Outage Dispatch Tool) (ODT).
- 1314 hours: Troubleshooter arrives onsite (Per FAS Record and ODT).
- 1315 hours: Transformer MTR#1009009112 disconnected (Per ILIS Record).
- 1503 hours: PG&E Repair crew dispatched (Per ODT).
- 1658 hours: Transformer MTR#1009009112 connected – Two customers restored (Per ILIS Record).
- 1745 hours: PG&E Repair crew arrives onsite, (Per ODT) and completes all repairs.

Corrective Notification Associated with Ignition

EC priority “A” Tag (#129352200) was created to replace a broken secondary cross-arm and service wire on SAP Pole ID: 101404242. All repair work was completed by the PG&E crew on August 8, 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

Incident Structure	SAP Pole ID: 101404242	
Info / Inspection	Most Recent Date	Findings
Install Date:	January 1, 1959	Douglas Fir – Class 5 – Height 45'
Inspection:	October 12, 2023	GO165 Inspection – EC priority “E” Tag # 127258926 submitted to replace a decayed cross-arm and damaged insulator. There was still an open tag on the date of the incident.
	N/A	
Patrol:	N/A	
	N/A	
Corrective History:	August 08, 2024	EC priority “A” Tag (#129352200) was created to replace a broken secondary cross-arm and service wire on SAP Pole ID: 101404242.
Aerial Inspection Records:	October 07, 2019	SAP Pole ID 101404242 No abnormal conditions visible, (see Figure 11).
VM Inspection:	May 28, 2024	No findings at the incident location.
EVM Inspection:	N/A	A proximity search was performed in the Enhanced Vegetation Management (EVM) database and no trees were within a 1/8-mile radius of the coordinates provided for this incident.
Equipment Test:	N/A	
Pole Intrusive Test:	May 17, 2022	Passed with no issues
WSIP Inspection:	March 04, 2019	There were no compelling abnormal conditions reported

*Incident Location: SAP Pole ID: 101404242

Hazard Barrier Analysis:

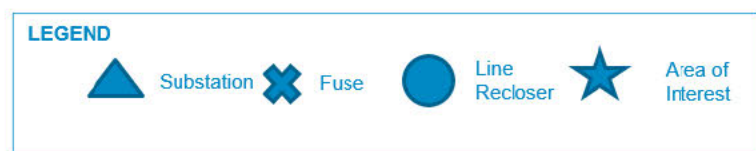
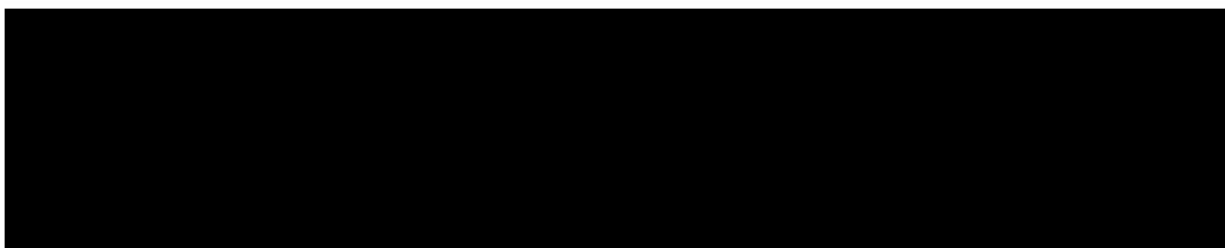
Hazard	Vegetation Contact	Sub-Hazard	Branch (Decay, Defect, Cavity)
Target	A tree branch that fell into a secondary service drop causing a fire		
Barrier	Expected vs. Observed Performance	Why did the barrier not prevent the ignition event? (See ICF Codes)	Opportunity
Barriers that are Evaluated as Opportunity			
Distribution Annual Vegetation Patrol	Expected Performance: prune tree to re-establish line of sight to identify secondary conductor strain or abrasion; Observed Performance: Barrier performed as expected	[A3B1C1D1 - Non-Conformance: Work Non-Conformance; Work Identification; Required work not identified]	The programmatic decision to not perform work on service drops negatively affected the ignition.

Covered Overhead Secondary and Insulated Service Drop Cable	Expected Performance: Covered Overhead Secondary and Insulated Service Drop Cable; Observed Performance: Barrier did not exist	[A4B2C1D2 - Strategy: Program Strategies; Line Equipment-Related; Program limited to certain conductors]	installation of covered conductors can potentially reduce ignitions for downed wires.
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Potential Next Steps / Associated CAP Items:

None at this time.

Single Line Diagram



Photos and Diagrams of Events

This report is preliminary and based on available information as of **September 18, 2024**; event data is subject to change based upon subsequently discovered information.

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Internal

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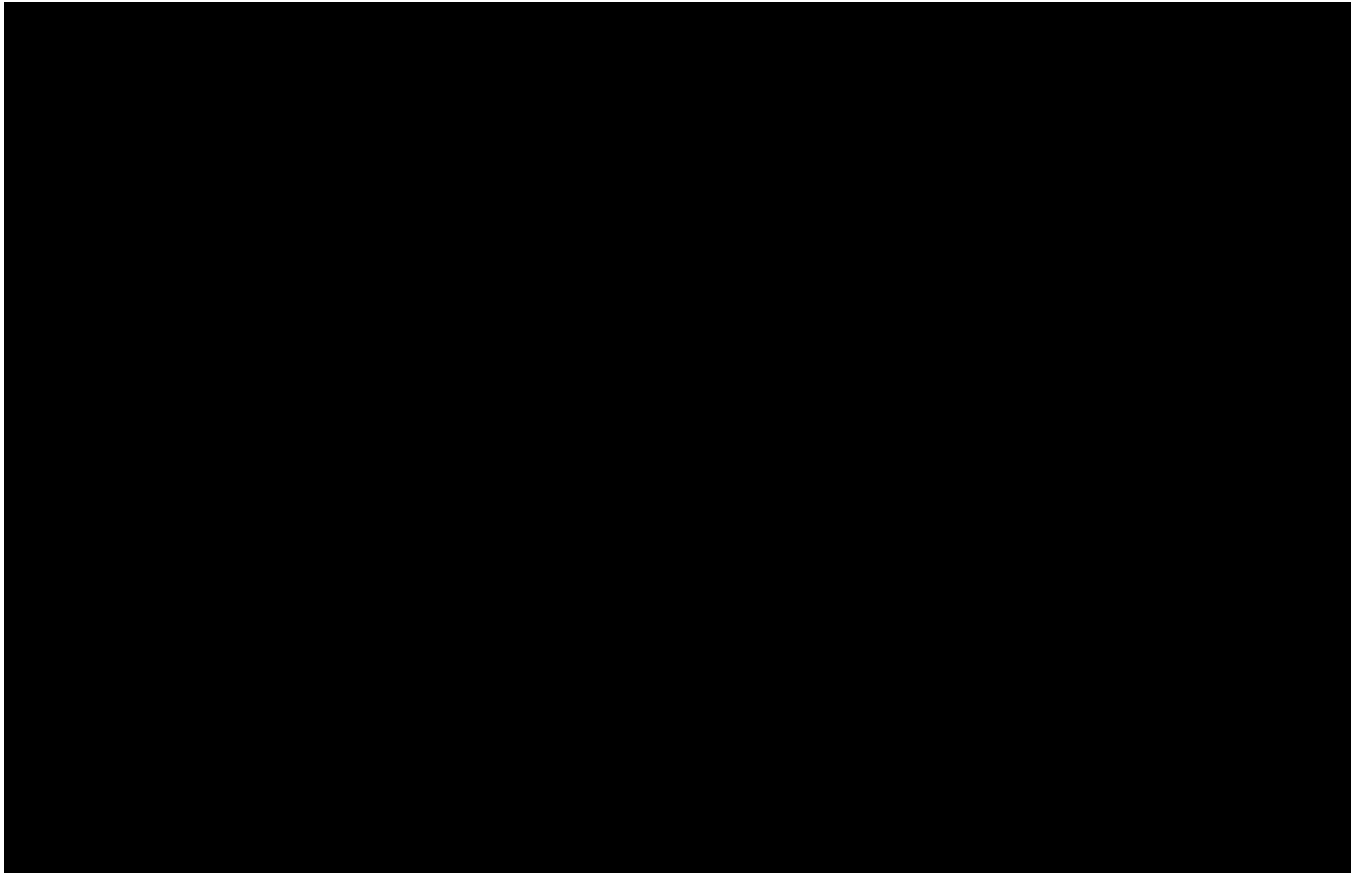


Figure 1 - Google Earth Diagram of the Diamond Springs 1106 Circuit. The location of the fire is approximate based on reports and pictures provided.

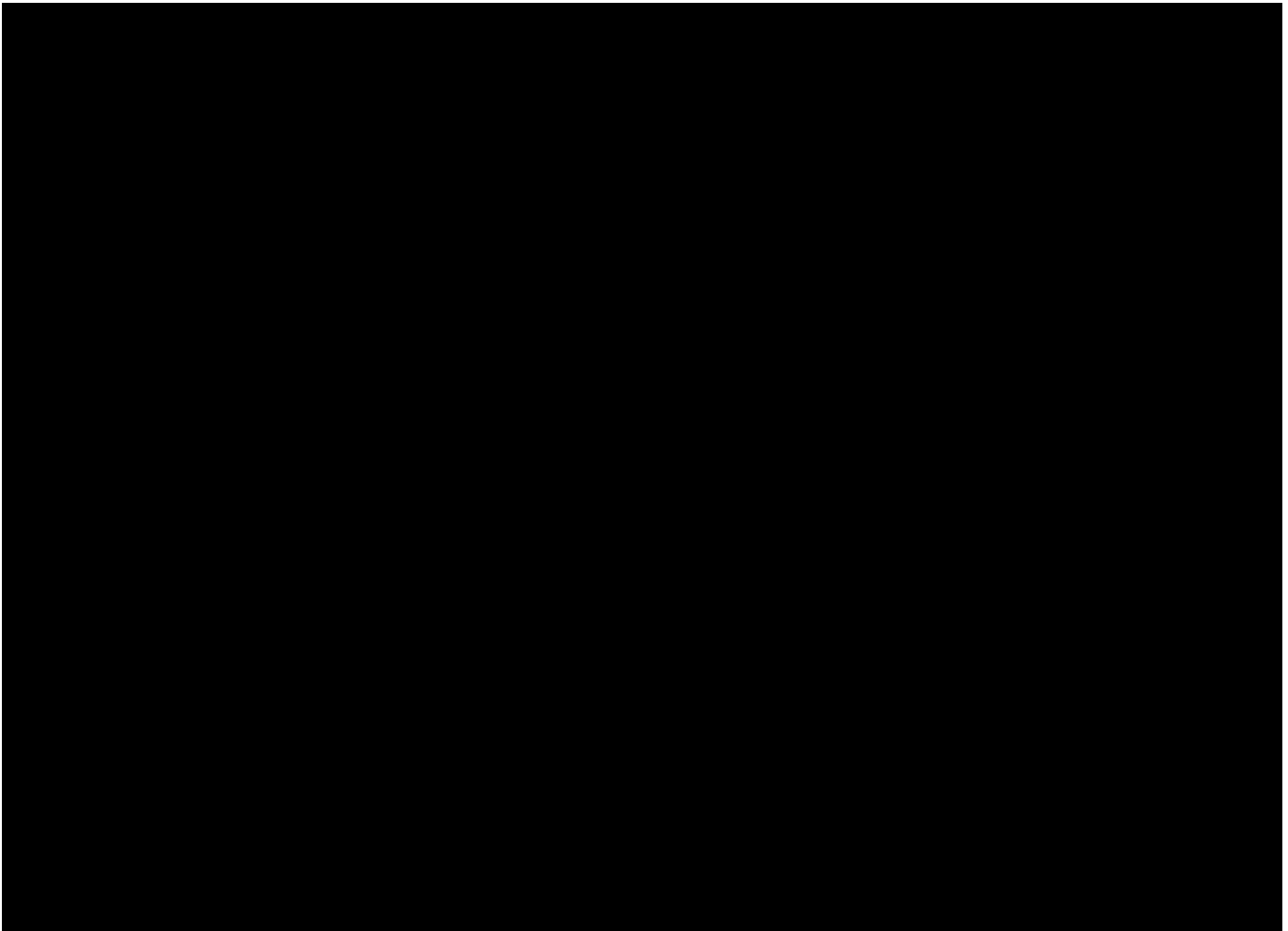


Figure 2 - EDGIS Diagram of the Diamond Springs 1106 Circuit and upstream dynamic protective devices between the Substation and Incident location (SAP Pole ID: 101404242).



Figure 3 - Fire burn scar area and SAP Pole ID: 101404242. Picture taken by the troubleshooter on August 08, 2024.



Figure 4 – Ignition and fire origin area where the large tree branch/limb fell onto the Secondary Service line conductor which caused arcing and burned vegetation below. Picture taken by the troubleshooter on August 08, 2024.



Figure 5 – Close-up of large tree branch/limb fell onto the Secondary Service line conductor which caused arcing and burned vegetation below. Picture taken by the troubleshooter on August 08, 2024.



Figure 6 – CAL FIRE onsite to assist in controlling and suppressing the fire spread, picture taken by the troubleshooter on August 08, 2024.



Figure 7 - Five-span patrol completed by the VM inspector on August 9, 2024.



Figure 8 - Service drop detail picture taken by the VM inspector on August 9, 2024.



Figure 9 - Limb defect and cavity on failed Live Oak tree, taken by the VM inspector on August 9, 2024.



Figure 10 – Failed limb interior on the Live Oak tree, taken by the VM inspector on August 9, 2024.



Figure 11 - SAP Pole ID: 101404242, picture taken from Shaper Shape dated October 07, 2019

Attachments

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



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