



Preliminary Ignition Investigation Report

Ignition Database Index:	20240927
Electric Incident Investigation (EII) Number:	N/A
Incident Name:	Uvas
PG&E Facility Ignition?	Yes
CPUC Reportable Ignition?	Yes
Date & Time of Incident:	July 11, 2024, at 2358 hours
Street Address:	[REDACTED]
City:	Morgan Hill
County:	Santa Clara
Latitude/Longitude:	[REDACTED]
State Responsibility Area (SRA) / Local Responsibility Area (LRA) / Federal Responsibility Area (FRA)	SRA
PG&E Division:	San Jose
High Fire Threat District (HFTD):	Tier 3
High Fire Risk Area (HFRA):	Yes
EPSS Buffer:	No
Fire Index Area (FIA):	553
Fire Potential Index (FPI) Rating: FIA	R3
Fire Potential Index (FPI) Rating: Circuit	R4
Was there a PSPS event at the time of ignition?	No
Suspected Initiating Event:	Vegetation Contact
Failure Driver:	Contact from object
Failure Sub-driver:	Contact – vegetation
Circuit:	Morgan Hill 2111
Circuit Protection Zone:	Morgan Hill 2111 XR398
Nominal Voltage:	12kV
Pole SAP Equipment ID:	100604336
Subject to PRC 4292 Veg Pole Clearance:	No
PG&E Equipment associated with ignition:	4ACSR Primary Conductor
EPSS enabled at time of ignition?	Yes
Fault Type:	Line to ground
Wire Down (Primary)?	Yes
Lead Agency/Agency Having Jurisdiction:	CAL FIRE
Fire Size:	3 meters – 0.25 acres

FAS Field Remarks:	Crew to repair. Wire down outage started fire. Created A Tag with details. Filled out fire form. Suspect cotter key missing causing wire to detach from pole.
HAWC Summary:	Resources responded to a vegetation fire at [REDACTED], tier 3 area. The fire was contained at approximately .25 acre. There was an outage in the immediate area, OIS #2514546, impacting approximately 401 customers on the MORGAN HILL 2111, EPSS enabled and Everbridge message sent at 0213 hours. SIPT did not respond and no damage reported. No incident report and no preliminary fire report. Notifications have been made to HAWC Ops with an open/close with EII for the rapid containment. Closing incident barring any significant change in the situation.
Injuries / Fatalities / Property Damage / Media Attention:	0/0/0/0
Weather Conditions:	At 00:00 near the incident location: Temperature: 69.7°F Relative Humidity: 61% Wind Speed: 1.6 mph Wind Gust: 4.6 mph out of the east-southeast
Red Flag Warning (RFW) / High Wind Warning (HWW):	No RFW, No HWW
911 Standby Relief Time:	26 minutes
OIS #:	2514546
ILIS #:	24-0087043
FAS #:	T006446904, T006446905
TOTL #:	N/A
Assigned Attorney:	N/A
Ignition Investigator & Phone:	[REDACTED]

Executive Summary

On July 11, 2024, at 2353 hours PG&E's Distribution Control Center (DCC) began receiving first no light (FNL) notifications from SmartMeters™ in the area of Uvas Road and Croy Road in Morgan Hill. At 2354 hours, Line Recloser (LR) XR398 operated automatically as the result of sensitive ground fault (SGF) and Downed Conductor Detected (DCD) fault. LR XR398 is on the Morgan Hill 2111 circuit.

The Incident Location was near Little Uvas Road, Morgan Hill in Santa Clara County, a Tier 3 High Fire Threat District (HFTD). The Morgan Hill 2111 circuit is 12kV two phase primary overhead distribution circuit and PG&E's Enhanced Powerline Safety Settings (EPSS) was enabled in July 2024 due to the increased fire danger in the area. 401 customers were impacted by the incident.

PG&E dispatched a troubleshooter at 2358 hours in response to LR XR398 operating and indication of a DCD fault. On July 12, 2024, at 0010 hours the property owner contacted 911 to report a vegetation fire at the Incident Location. At 0016 hours, CAL FIRE dispatched engines to the Incident Location that arrived at 0040 hours. CAL FIRE attempted to get engines to the location of the fire but one engine became stuck on the only access road, blocking all other engines from approaching the fire. CAL FIRE was able to use dirt, tools and back pumps to stop forward progress. At 0147 hours the troubleshooter opened Fuse 40673 and at 0205 hours he reported a wire down three spans load side of the fuse as a result of a tree falling into the line. The line-to-ground wire-down fault resulted in a fire approximately 0.25 acres in size. At 0211 hours LR XR398 was closed, restoring power to 400 customers. A PG&E crew replaced one span of one phase of 4ACSR primary conductor and at 1547 hours the crew was cleared to close Fuse 40673, restoring the final customer.

Electric Corrective Notification #129213237 was created. This priority "A" notification stated to replace one span of one phase of 4ACSR conductor. A PG&E crew completed the repairs on July 12, 2024, at 1547 hours.

On July 11, 2024, a Vegetation Management Inspector (VMI) from PG&E's Vegetation Management (VM) program performed a VM fire investigation. The VMI identified the incident tree as a sycamore with a diameter at breast height (DBH) of 20 inches and a height of 58 feet. The tree was alive at the time of the failure and failure occurred just above the trunk flare. The VMI observed decay at the root flare that likely would not have been visible by external observation. The tree did have signs of carpenter ants and decay higher in the canopy, but it is unlikely that these signs would have been indicative of basal decay. The last VM inspection occurred on December 12, 2023, with the next planned inspection in the third quarter of 2024. During that Second Patrol inspection, the tree was prescribed for radial pruning to achieve 12 feet of clearance from the conductor on OneVM work order 0098087. The work had not been completed at the time of the incident, but it is unlikely that it would have mitigated the basal decay-related failure.

An Extent of Conditions (XoC) Patrol was conducted on July 15, 2024, to inspect for non-compliant trees, dead or hazardous trees, and any tree that would not maintain clearance until the next inspection date. The patroller identified two priority 2 trees and 10 routine priority trees for work on Tree Work Order 98087. No trees were identified as 'fall-in' hazards. Seven of these trees were prescribed for removal due to their growth rates and size, while the other five trees were listed for radial pruning to achieve 14 feet of clearance from conductors.

According to Weather Station 399PG, approximately three miles from the Incident Location, the temperature at the time of the incident was 70°F with a relative humidity of 61%. Winds were out of the east-southeast at 1.6 miles per hour and gusts up to 4.6 miles per hour. There were no Red Flag or High Wind Warnings for the area.

This information is preliminary.

System Protection Analysis

EPSS was enabled on Morgan Hill 2111 on May 29, 2024. On July 11, 2024, at 2354 hours, a tree fell into the line, resulting in a primary wire down causing a high impedance fault and an ignition. Upstream LR XR398 operated automatically and sent a trip signal in 2.3 seconds after the downed conductor was initially detected. The recorded fault magnitude was 10.3A on ground. Oscillography was captured but does not show relevant data. EPSS protective devices operated as expected.

Ignition Impact

The ignition resulted in a vegetation fire spreading approximately .25 acres. A sustained outage lasting 888 minutes occurred, affecting 401 customers. No injuries, property damage or significant media coverage associated with this incident was identified.

Sequence of Events

July 11, 2024

- 2353 hours – PG&E’s DCC began receiving FNL SmartMeter™ notifications.
- 2354 hours - LR XR398 opened and PG&E records First No Light via SmartMeter™ notifications.

July 12, 2024

- 0001 hours – PG&E dispatches a troubleshooter to investigate.
- 0147 hours – PG&E troubleshooter opens Fuse 40673.
- 0205 hours – PG&E troubleshooter reports line down and a fire three spans load side of Fuse 40673.
- 0211 hours – LR XR398 is closed restoring 400 customers.
- 1547 hours – Fuse 40673 is closed and final customer restored.

Corrective Notification Associated with Ignition (notification created, was it worked by who and what were repairs)

On July 12, 2024, a priority “A” Electric Corrective Notification 129213237 was created because of this incident. A PG&E crew replaced one span of one phase of 4ACSR conductor.

Pending Work

Type	Number	Description	Priority	Date Identified	Due Date
EC Notification	125031504	Replace Pole – Past Due	E	December 12, 2022	June 15, 2023
COE Notification	N/A				
LC Notification	N/A				
Veg Work Order	0098087	radial pruning to achieve 12 feet of clearance from the conductor		12/12/2023	Quarter 3, 2024

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

This report is preliminary and based on available information as of **December 9, 2024**; event data is subject to change based upon subsequently discovered information.

Asset Info & Most Recent Inspections and Tests

Source Side Structure		
Info / Inspection	Most Recent Date	Findings
Install Date:	1957	
Inspection:	December 15, 2022	Pole rotten/decayed – Needs Replaced Loose Guy, missing guy marker. Electric Corrective Notification 125031504 created for pole replacement / past due
	July 22, 2021	No abnormalities identified
Patrol:	May 15, 2024	No abnormalities identified
Corrective History:	April 7, 2019	Electric Corrective Notification 116973613 – replace rotten pole - canceled
	December 15, 2022	Electric Corrective Notification 125031504 – replace rotten pole – past due
	July 12, 2024	Electric Corrective Notification 129213237 – pole/ conductor replacement - complete
Aerial Inspection Records:	June 12, 2019	Per SharperShape
VM Inspection:	December 12, 2023	Tree identified for radial pruning by Second Patrol.
EVM Inspection:	N/A	N/A
Equipment Test:	N/A	
Pole Intrusive Test:	April 5, 2016	
WSIP Inspection:	N/A	

*Incident Location: SAP ID: 100604336

Load Side Structure		
Info / Inspection	Most Recent Date	Findings
Install Date:	1957	
Inspection:		
Patrol:	May 15, 2024	No abnormalities identified
Corrective History:		
Aerial Inspection Records:	June 12, 2019	Per SharperShape
VM Inspection:	December 12, 2023	

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EVM Inspection:		(Note: document if “not previously in EVM Scope”)
Equipment Test:		
Pole Intrusive Test:	April 5, 2016	
WSIP Inspection:		

*Incident Location: SAP ID: 100604335

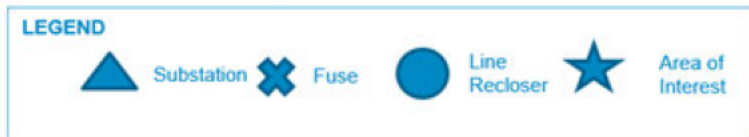
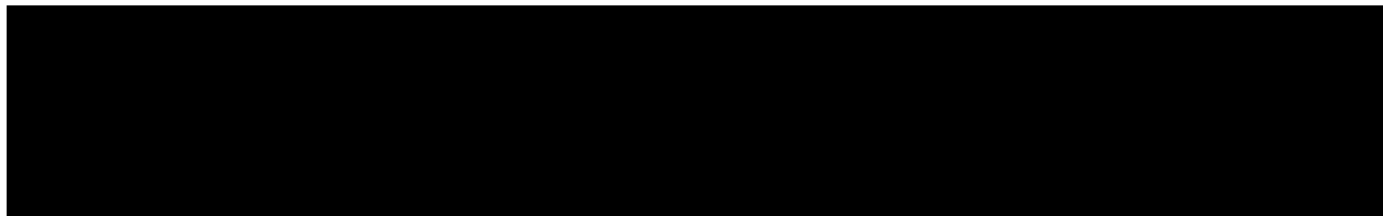
Hazard Barrier Analysis:

Hazard	Vegetation Contact	Sub-Hazard	Fallen Tree
Target	Fallen tree contacting PG&E assets causing 0.25-acre fire in Tier 3 HFTD.		
Barrier	Expected vs. Observed Performance	Why did the barrier not prevent the ignition event? (See ICF Codes)	Opportunity
Barriers that Positively Affected Ignition			
Enhanced Powerline Safety Settings - Downed Conductor Detection	Expected Performance: Operate protective devices when a downed conductor is detected; Observed Performance: Barrier performed as expected	N/A	EPSS enabled mode 3, with SGF and DCD. EPSS signaled in 2.3 seconds
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	Tree wire can reduce the risk of fire in HFTD area.

Potential Next Steps / Associated CAP Items:

Tree Work Order 98087 was created on December 12, 2023, that identified two priority 2 trees and 10 routine priority trees for prescribed work. This includes the removal of seven trees due to growth rate and 14 feet of radial trimming for five additional trees. As of November 19, 2024, Tree Work Order 98087 was in progress.

Single Line Diagram



Photos and Diagrams of Events

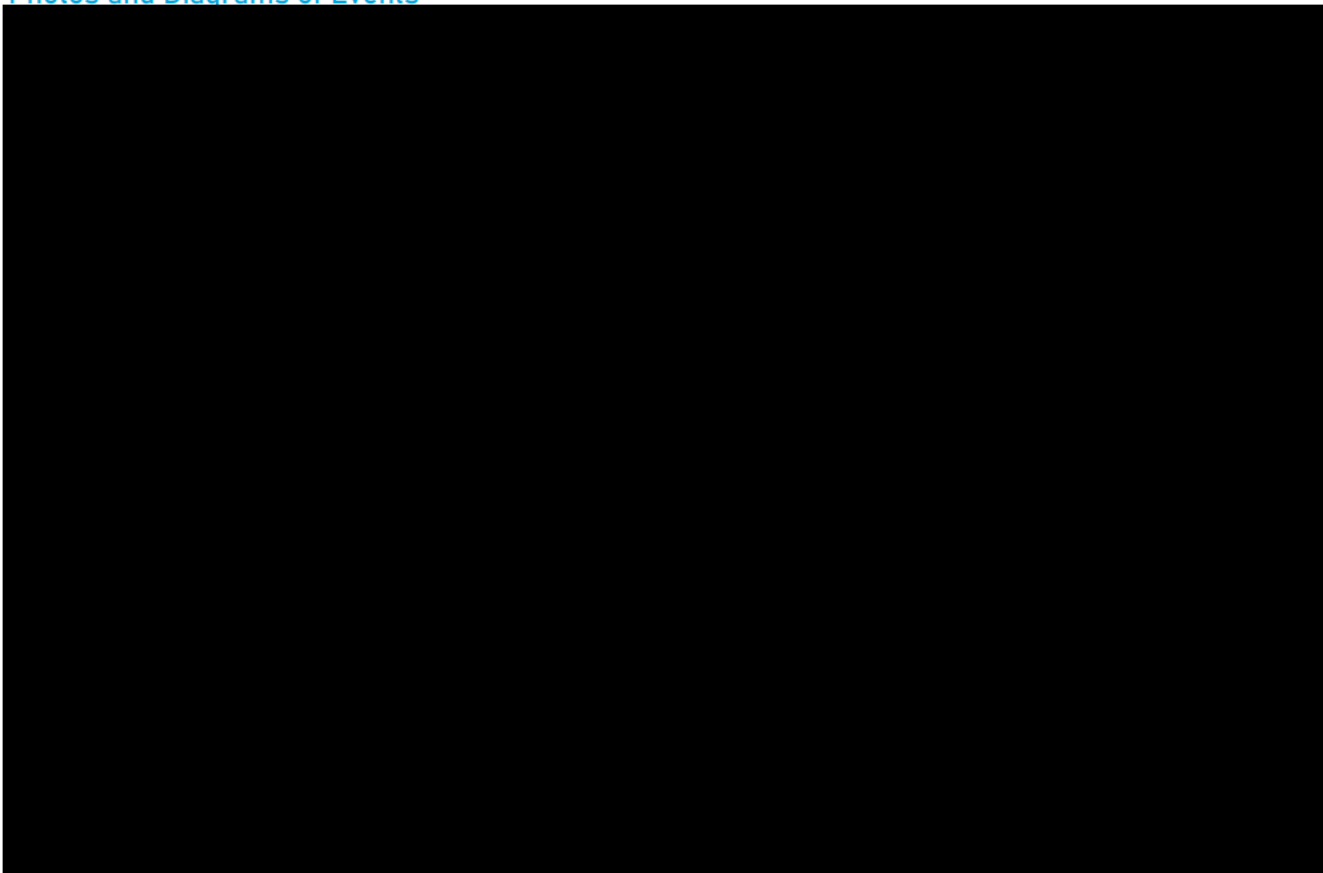


Figure 1 Image of map from EDGIS depicting the ignition location. Tree fell onto primary conductor, causing conductor to fall and ignite a .25-acre vegetation fire shown by the red X between poles SAP ID 100604336 and SAP ID 100640335



Figure 2 Image of map from Google Earth depicting vegetation in the area of the ignition location.



Figure 3 Photo depicts burned vegetation and broken primary conductor on ground. Photo taken by Vegetation Management.



Figure 4 Photo depicts a sycamore tree with green leaves failed and laying on the ground. Photo taken by Vegetation Management.



Figure 5 Photo depicts cavity with decay, carpenter ants, and eggs observed approximately 20' up the trunk from the flare. Photo taken by Vegetation Management.



Figure 6 Photo depicts trunk failure at the base of the sycamore tree just above the trunk flare. Photo taken by Vegetation Management.



Figure 7 Photo depicts Pole (SAP ID 100604335) showing broken conductor. Photo taken by Vegetation Management.

Attachments

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



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