



Preliminary Ignition Investigation Report

Ignition Database Index:	20241105N
Electric Incident Investigation (EII) Number:	N/A
Incident Name:	Town
PG&E Facility Ignition?	Yes
CPUC Reportable Ignition?	Yes
Date & Time of Incident:	August 7, 2024 @approximately 1059 hours
Street Address:	Rural, approximately 1.6 miles north of Valley Springs (near Watertown Road)
City:	Valley Springs
County:	Calaveras
Latitude/Longitude:	38.218395, -120.835752
State Responsibility Area (SRA) / Local Responsibility Area (LRA) / Federal Responsibility Area (FRA)	State Responsibility Area
PG&E Division:	Stockton
High Fire Threat District (HFTD):	Tier 2
High Fire Risk Area (HFRA):	Yes
EPSS Buffer:	No
Fire Index Area (FIA):	345
Fire Potential Index (FPI) Rating: FIA	R5
Fire Potential Index (FPI) Rating: Circuit	NA
Was there a PSPS event at the time of ignition?	No
Suspected Initiating Event:	Contact – Animal – Bird
Failure Driver:	Contact from object
Failure Sub-driver:	Contact – Animal – Bird
Circuit:	Valley Springs #2 60kV (Pardee #1 Tap 60kV)
Circuit Protection Zone:	Circuit Breaker (CB) 6332 & CB 6322
Nominal Voltage:	60kV
Pole SAP Equipment ID:	40905035 Structure ID 006/092
Subject to PRC 4292 Veg Pole Clearance:	No
PG&E Equipment associated with ignition:	Primary Conductors
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:	10 acres

FAS Field Remarks:	N/A
HAWC Summary¹:	Resources responded to a vegetation fire at 1711 Watertown Road in a Tier 2 area. The fire was contained at 10 acres. There was not an outage in the immediate area. SIPT responded to this incident. They performed the following activities: No activities performed per PSS. There was damage to assets. Damaged Transmission Poles- 1 An Everbridge message was not sent. Notifications: HAWC Ops, PSS, DCC <input checked="" type="checkbox"/> , GCC <input checked="" type="checkbox"/> , GAS <input type="checkbox"/> , ENOC <input type="checkbox"/> , HYDRO <input type="checkbox"/> , REMOTE GRID <input type="checkbox"/> An Incident Report was not sent. A Preliminary Fire Report was not sent. All functional areas have been notified, closing barring any significant changes.
Injuries / Fatalities / Property Damage / Media Attention:	No/No/No/No
Weather Conditions²:	At 1100 hours near the Incident Location: Temperature: 92.9 degrees Relative Humidity: 20% Wind Speed: 5.1 MPH from the west Wind Gust: 9.3 MPH
Red Flag Warning (RFW) / High Wind Warning (HWW):	No/No
911 Standby Relief Time:	N/A
OIS #:	N/A
ILIS #:	N/A
FAS #:	N/A
TOTL #:	T24-013763
Assigned Attorney:	N/A
Ignition Investigator & Phone:	

¹ HAWC summary entered verbatim.

² Weather Observation Site: 066PG (Elevation 759 feet approximately 3.83 miles south-southeast of the Incident Location): Mesowest

Executive Summary

On August 7, 2024, at 1059 hours, PG&E became aware that the Valley Springs #2 (Pardee #1 Tap 60kV) transmission line relayed and did not test as directed by operations due to the Enhanced Powerline Safety Settings (EPSS) enabled at the time. A PG&E troubleshooter was dispatched to patrol, arriving to an overhead (OH) segment of the Valley Springs #2 60kV (Pardee #1 Tap 60kV) transmission circuit at a rural location approximately 1.5 miles north of Valley Springs, CA. The troubleshooter located CAL FIRE personnel conducting suppression and mop up efforts near the double-circuit³ SAP Pole ID 40905035/Structure ID 006/092 (“Incident Location” – “Pole #1”). At the time of this incident there was an active Osprey nest at the top of Pole #1 with one baby chick still alive and inside when the troubleshooter arrived. The other baby chick was found deceased near the base of Pole #1 as a result of the arc flash. The troubleshooter hypothesized the baby chick had left the nest and came into contact with two phases of the Valley Springs #2 line. The resulting arc flash and combustion event ignited the light, flashy fuels on the ground below. This incident occurred within a Tier 2 HFTD zone during R5 conditions. The fire was approximately 10 acres in size. There was no damage to PG&E equipment warranting repair. The troubleshooter patrolled the entire circuit before communicating their findings to the Grid Control Center (GCC).

An electric program manager and PG&E’s avian subject matter expert (SME) analyzed the incident. They concurred that the baby Osprey chick likely exited the nest and came into contact with two OH phases of the Valley Springs #2 circuit at the same time, causing a fault and arc flash event. A Bird Incident Report⁴ was created on August 7, 2024, for the incident. The remaining, surviving baby Osprey chick was left undisturbed and it was reported by operations that the parents returned to the nest. Due to wildlife conservation efforts, the nest was left undisturbed until the entire family vacated the nest. On September 17, 2024, the empty nest was completely removed from PG&E assets.

In addition to the nest removal, the double-circuit structure also has an LC Priority ‘E’ Tag (#129351590) for a two-pole design request, with a due date of November 7, 2024.

It was a hot and dry day on August 7, 2024, near the Incident Location. The high temperature for the day was 100.6°F degrees at 1540 hours and the low temperature was 72.9°F degrees at 0540 hours. The relative humidity was 45% at 0540 hours and was as low as 12% at 1700 hours. The strongest wind gust was 15.6 miles per hour (MPH) at 1700 hours from the west-northwest.

System Protection Analysis

The Valley Springs #2 60kV transmission line is protected by the Valley Springs Circuit Breaker (CB) 6332 and CB 6322. The Valley Springs was enabled with Enhanced Powerline Safety Settings (EPSS)(Group #3) at the time of the event due to the FPI⁵ R5⁶ (Fire Potential Rating 5) conditions observed that day. The incident caused a line-to-line fault (B-C fault, 4,353 amps max) that lasted 78 milliseconds before CB 6332 & 6322 locked out, de-energizing the Incident Location. All protection devices operated as intended.

³ A PG&E structure that has two separate circuits installed on it.

⁴ Bird Incident Reporting (PG&E’s internal intranet interface for avian contact record tracking) – Incident Number: ETR0807241059

⁵ Utility Fire Potential Index Rating (FPIR): A rating to determine the risk of fire and its likely behavior. Its calculation and scale from ‘R1’ to ‘R5-Plus’ considers fuel moisture, humidity, wind speed, air temperature, and historical fire occurrence.

⁶ R5 – Fire danger is so critical that using some equipment and open flames is not allowed in certain areas.

Ignition Impact

The ignition was isolated to vegetation, resulting in a burn scar approximately 10 acres in size. There were no reports of injuries, fatalities, property damage or media attention. The incident happened on a 60kV transmission line with no known customer impact.

Sequence of Events

August 7, 2024

- 1059 hours – Valley Springs #2 relays, does not test (by design) – troubleshooter dispatched for patrol
- 1115 hours – HAWC starts tracking an ignition, dubbed ‘Town’ (initial source: Broadcastify)
- 1246 hours – T-line reports an ignition and a bird nest on Pole/Structure 006/092, reports equipment looks okay to energize
- 1305 hours – Patrol completed, restoration plan for Valley Springs #2 commences (CB 6332 tested & energized/CB 6322 looping)

Corrective Notification Associated with Ignition

There were no corrective actions associated with the ignition.

Pending Work

Type	Number	Description	Priority	Date Identified	Due Date
EC Notification	N/A				
COE Notification	N/A				
LC Notification	129351590	Replace structure per TD-1001M-JA06 – Install two-pole structure.	E	August 7, 2024	November 7, 2024
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		
Info / Inspection	Most Recent Date	Findings
Install Date:	1971	Single wood pole, McKormick & Baxter Co., 52.8 feet tall
Inspection:	June 2, 2022	Bird nest above or too close to conductor/insulator (<i>see Corrective History below</i>).
Patrol:	April 2, 2024	Non-routine air patrol – No new findings.

This report is preliminary and based on available information as of **August 8, 2024**; event data is subject to change based upon subsequently discovered information.

Corrective History:	March 17, 2023	LC Priority 'A' Tag (#125657691) – Removed birds' nest (<i>see Inspection above</i>). Completed March 17, 2024.
Aerial Inspection Records:	March 17, 2022	Sherlock ⁷ photos in the shared folder. No compelling or abnormal conditions.
VM Inspection:	N/A	
EVM Inspection:	N/A	
Equipment Test:	N/A	
Pole Intrusive Test:	February 17, 2011	Full Excavate – Wood Fume, Osmose
WSIP Inspection:	N/A	No record of this inspection found.

*Incident Location: SAP Pole ID: 40905035/Structure ID: 006/092

Hazard Barrier Analysis:

Hazard	Contact from Object	Sub-Hazard	Contact – Animal – Bird
Target	To Reduce Bird Contact Ignitions.		
Barrier	Expected vs. Observed Performance	Why did the barrier not prevent the ignition event? (See ICF Codes)	Opportunity
Barriers that were Assessed as Opportunities			
Pole Clearing Program	<p>Expected Performance: Limit fire spread potential near poles for a PG&E equipment involved ignition event within State Responsibility Areas, poles with non-exempt equipment, and selected poles outside of the regulations of PRC 4292.</p> <p>Observed Performance: Barrier did not exist</p>	A4B2C3D1 - Only applies to poles with non-exempt equipment	If this pole had been cleared, there is a chance the ignition would have been smaller or would not have started at all. This is an example of an active nest pole - The nest was called out in a 2022 inspection. There was a 2023 tag that was completed, removing the nest. They returned (as they often do) and built the nest again in 2024.
Raptor Protection Hardware	<p>Expected Performance: Prevent birds from creating electrical faults between energized components with physical barriers</p>	A4B2C5D2 – Location not prioritized for program.	The current design does not allow for raptor protection hardware.

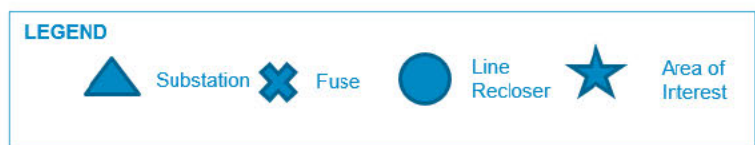
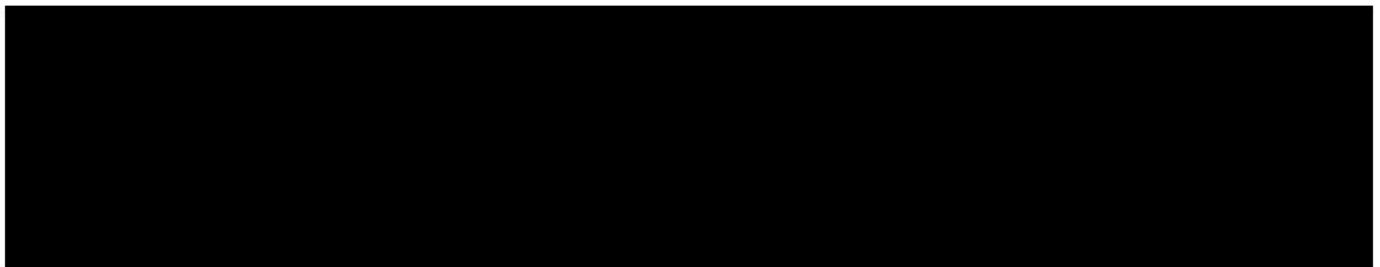
⁷ Sherlock is an online platform where transmission aerial photos are uploaded and stored.

	Observed Performance: Barrier did not exist		
Raptor Safe Clearances	Expected Performance: Prevent birds from creating electrical faults with Phase-Phase and Phase-Ground Separation; Observed Performance: Barrier did not exist	A4B2C5D1 - Bird guards installed in areas without sufficient clearance	The bird contacted two phases at the same time, indicative that the phases are too close to prevent appropriate avian contact.
Other Barriers Assessed			
Nest Clearing	Expected Performance: Identify and clear inactive nests on transmission and distribution structures.; Observed Performance: Barrier performed as expected	[A1B4C2D3 - Limitation: Operational Limitation; Other Operational Limitation; Nest active at time of ignition and could not be removed]	The last inspection of this location was April 2, 2024 - 4 months before the ignition. The nest was built quickly and active immediately.

Potential Next Steps / Associated CAP Items:

- LC priority 'E' Tag (#129351590) was created on August 8, 2024, to request a two-pole structure to be designed due to bird nesting activity and ignition.
- CAP (#129628457) submitted October 3, 2024, for process improvement review of active nest removal.

Single Line Diagram



Photos and Diagrams of Events

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Internal

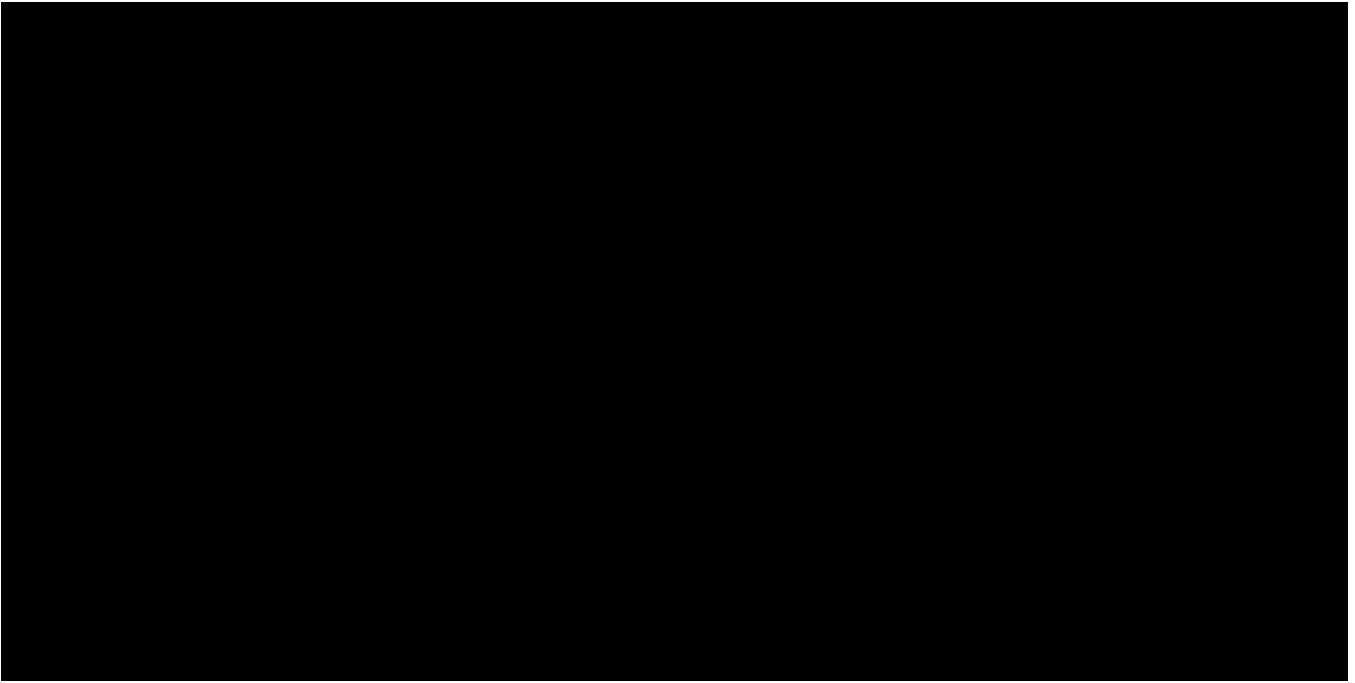


Figure 1 Google Earth Pro map of Incident Location.



Figure 2 Pole #1 - Incident Location - Bird nest on both sides of upper crossarm. Photo taken by troubleshooter on August 7, 2024.



Figure 3 Pole #1 - Incident Location - Bird nest on both sides of upper crossarm. Photo taken by troubleshooter on August 7, 2024.



Figure 4 Surviving baby Osprey still in nest. Photo taken by troubleshooter on August 7, 2024.

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Figure 5 Baby Osprey that came into contact with the phases, found near the base of the pole. Photo taken by troubleshooter on August 7, 2024.

Attachments

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

[REDACTED]

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