



Preliminary Ignition Investigation Report

Ignition Database Index:	1476
Electric Incident Investigation (EII) Number:	N/A
HAWC Incident Name:	N/A
PG&E Facility Ignition?	Yes
CPUC Reportable Ignition?	Yes
Date & Time of Incident:	August 29, 2022 @ 1614 hours
Street Address:	2 miles south of San Sebastian Road
City:	Arvin
County:	Kern
Latitude/Longitude:	[REDACTED]
PG&E Division:	Kern
High Fire Threat District (HFTD):	Non-HFTD
High Fire Risk Area (HFRA):	No
Non-Tier Buffer:	No
Fire Index Area:	448
Fire Potential Index (FPI) Rating:	R3
Was there a PSPS event at the time of ignition?	No
Failure Driver:	Contact from object
Failure Sub-driver:	Bird contact
Circuit:	Tejon 1103
Circuit Protection Zone:	Tejon 1103-145334
Nominal Voltage:	12kV
PG&E Equipment associated with ignition:	Transformer
EPSS enabled at time of ignition?	Yes
Fault Type:	Line to Ground
Wire Down (Primary)?	No
MAVF Score	TBD
Lead Agency/Agency Having Jurisdiction:	Fire self-extinguished
Fire Size:	Less than 0.25 acres
FAS Field Remarks:	Bird contact with Surge-Protecting (SP) transformer jumpers, caused small fire at base of pole in weeds. Appears to have self-extinguished prior to arrival. Cut transformer in the clear. Submitted EC A tag for crew to replace or estimator to do idle facility investigation. Sent bird form to clerk.
HAWC Summary:	N/A
Injuries / Fatalities / Property Damage / Media Attention:	No injuries, fatalities or property damage and no known media coverage

Weather Conditions:	Temperature 92.8 degrees, Relative Humidity 27%, Winds speed 4.5 MPH from the west-northwest, wind gust 8.0 MPH
Red Flag Warning (RFW) / High Wind Warning (HWW):	No Red Flag Warning or High Wind Warning in effect
911 Standby Relief Time:	N/A
OIS #:	1794357
ILIS #:	22-0103285
FAS #:	T005719494, T005719490
Assigned Attorney:	N/A
EPSS Engineer:	
Asset Strategy SME reviewer:	
EII Ignition Investigator & Phone:	

Executive Summary:

On August 29, 2022 at 1620 hours, a PG&E troubleman was dispatched to the Tejon 1103 12 kV three-phase primary overhead distribution circuit near San Sebastian Road in the community of Arvin, Kern County. The troubleman was dispatched in response to multiple Smart Meter™ auto-generated reports of an outage. The troubleman arrived on scene at 1702 hours and noted an approximate 18 x 24-foot fire beneath pole SAP ID # 100223285 (see figure 4 below). According to the troubleman, the fire appeared to have self-extinguished, and no emergency fire department personnel responded.

PG&E's Enhanced Powerline Safety Settings (EPSS) were enabled for this circuit at the time of the ignition incident. Line Recloser (LR) 145334 tripped automatically at 1615 hours de-energizing the line.

Upon patrolling the area, the troubleman found a dead raptor on the ground (see figure 7 below) and noted that the fire beneath the pole was less than 0.25 acres in size. The troubleman described the incident as occurring at the 3-phase transformer (CGC # 517481555382). This pole is located in a Raptor Concentration Zone (RCZ) an area where birds of prey such as hawks, vultures, falcons, eagles, and owls are known to congregate. Prior to the ignition incident, there were never any bird guards on the pole. According to the Electric Distribution Asset Strategy team, poles in the Raptor Concentration Zone only require bird guards for new and reconstructed poles.

The troubleman cut the transformer in the clear and submitted one priority "A" Electric Corrective (EC) notification tag to replace the transformer and cutouts. The troubleman noted that the electric service did not appear to have been used recently. The troubleman also filled out and submitted the bird incident reporting form indicating that the existing pole had no bushing covers, perch guard or raptor framing.

According to PG&E Meteorology, the weather conditions at the time and location of the incident were: Temperature 92.8 degrees, Relative Humidity (RH) 27%, Wind Speed 4.5 Miles Per Hour (MPH) from the West-northwest with a wind gust of 8.0 MPH.

96 customers lost power as a result of the incident and the last customers power was restored by 1744 hours on August 29, 2022.

EPSS Analysis:

Engineers from PG&E's Distribution Asset team confirmed that the Tejon 1103 primary line was protected by an EPSS capable device (LR 145334) at the time of the ignition incident. LR 145334, a Viper recloser with Beckwith, Rev 7.1 controller was in recloser mode three and tripped automatically.

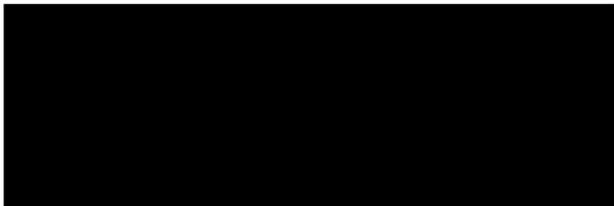
LR 145334 tripped due to a bird found at the transformer. This resulted in a Line to Line (LLL) fault of 1534A per the sequence of events. The LR did not trip on Downed Conductor Detection (DCD). The LLL fault was seen by the circuit breaker for 71 milliseconds (ms).

See Single Line Diagram and Protective Device ID, brand, and type below:



Tejon 1103 – Single Line Diagram and Protective Devices

LEGEND



Device ID	Brand	Type
1103/2	SEL/GE	IPAC
145334	Viper	Beck – Rev 7.1

Ignition Impact:

The ignition resulted in a fire less than 0.25 acres in size in the Arvin community of Kern County. The fire occurred when a raptor contacted the surge-protecting transformer jumpers and fell igniting the fuel bed beneath the pole. There were no reports of any injuries, fatalities, or property damage and no known media coverage. 96 customers lost power as a result of the incident and the last customer's service was restored by 1744 hours on August 29, 2022.

This report is preliminary and based on available information as of **December 14, 2022**; event data is subject to change based upon subsequently discovered information.

Sequence of Events:

August 29, 2022

- 1608 hours: First Smart Meter™ Last Gasp
- 1614 hours: First No Light (FNL)
- 1615 hours: Line Recloser 145334 opens
- 1620 hours: PG&E troubleman dispatched to the Tejon 1103 circuit
- 1702 hours: PG&E troubleman arrives on scene at the Tejon 1103 circuit
- 1722 hours: Switch 3440 opens
- 1739 hours: Switch 3440 closed
- 1744 hours: Line Recloser 145334 closed
- 1744 hours: Outage complete time in Outage Management Tool (OMT)

Corrective Notification Associated with Ignition:

One priority “A” Electric Corrective (EC) tag # 124391829 associated to pole SAP ID # 100223285 was created as a result of this incident. EC notes “Bird made contact with 3psp 480v transformer”. The transformer was replaced along with a cutout arm and cutouts. Repairs were completed on August 29, 2022.

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:

Info / Inspection	Most Recent Date	Findings
Install Date:	January 01, 1972	Class 4, 40-foot, wood pole
Inspection:	July 02, 2018	GO 165 Inspection No abnormal conditions noted
	October 24, 2013	Pole in field not shown in map
Patrol:	February 08, 2021	No abnormal conditions noted
	April 04, 2022	No abnormal conditions noted
Corrective History:	N/A	
Aerial Inspection Records:	N/A	Not in a HFTD
VM Inspection:	N/A	
EVM Inspection:	N/A	
Equipment Test:	N/A	
Pole Intrusive Test:	August 04, 2010	Pole test and treat-passed 100 % wood strength
WSIP Inspection:	N/A	Pole not in a HFTD

*Incident Location: Pole SAP ID # 100223285

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Hazard Barrier Analysis:

Hazard	Animal or Avian contact				
Target	Raptor contacting PG&E assets				
Barrier	Objective	Expected Performance	Did Barrier Perform as Expected	Did Barrier Contribute to Incident	Defect
Patrol & Inspection (P&I) Records	Identify any nonconformances with poles or line	Inspection or patrol would identify any issues with PG&E equipment	Yes	No	No issues noted in patrol or inspection records
Wildfire Safety Inspection Program (WSIP) Inspections in high fire threat districts (HFTD)	Identify any nonconformances with structures in HFTD	Inspection would identify any issue with PG&E equipment	N/A	No	Pole not in a HFTD
Enhanced Powerline Safety Settings (EPSS)	De-energize sections of the distribution grid when a fault is experienced to make the line safe	De-energize sections of the distribution grid until restored after visual inspection	Yes	No	LR 145334 opened automatically, de-energizing the line
Avian Protection Plan	Reporting and documenting avian incidents and establishing corrective actions	Implement avian-safe construction and corrective actions to reduce the risks to migratory and threatened or endangered birds	No	Possibly	Prior to the ignition incident, this pole was not considered "Bird safe" since this incident, this pole and seven adjacent poles have been retrofitted with avian protection

Potential Next Steps / Associated CAP Items:

- Poles in the Raptor Concentration Zone such as the one occurring in this incident only require bird guards for new and reconstructed poles. Since this incident occurred, this pole SAP and seven adjacent poles have been retrofitted with bird guards.

Photos and Diagrams of Events

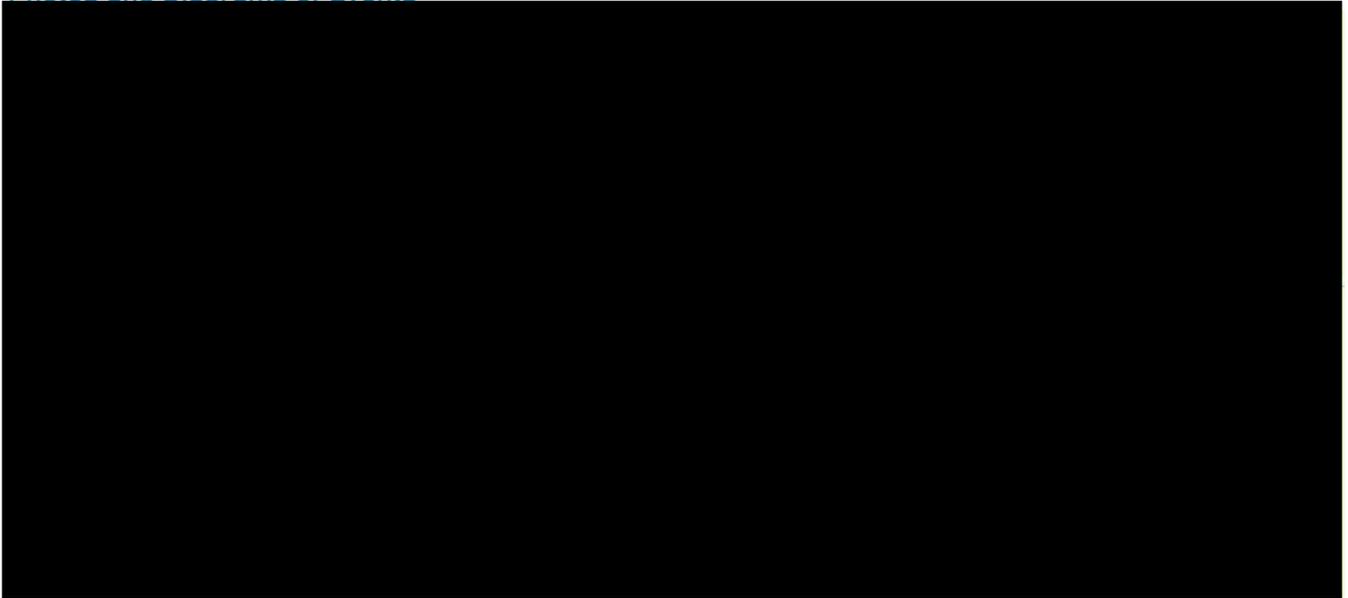


Figure 1 EDGIS Diagram of the Tejon 1103 circuit with red arrow pointing to pole SAP ID # 100223285.

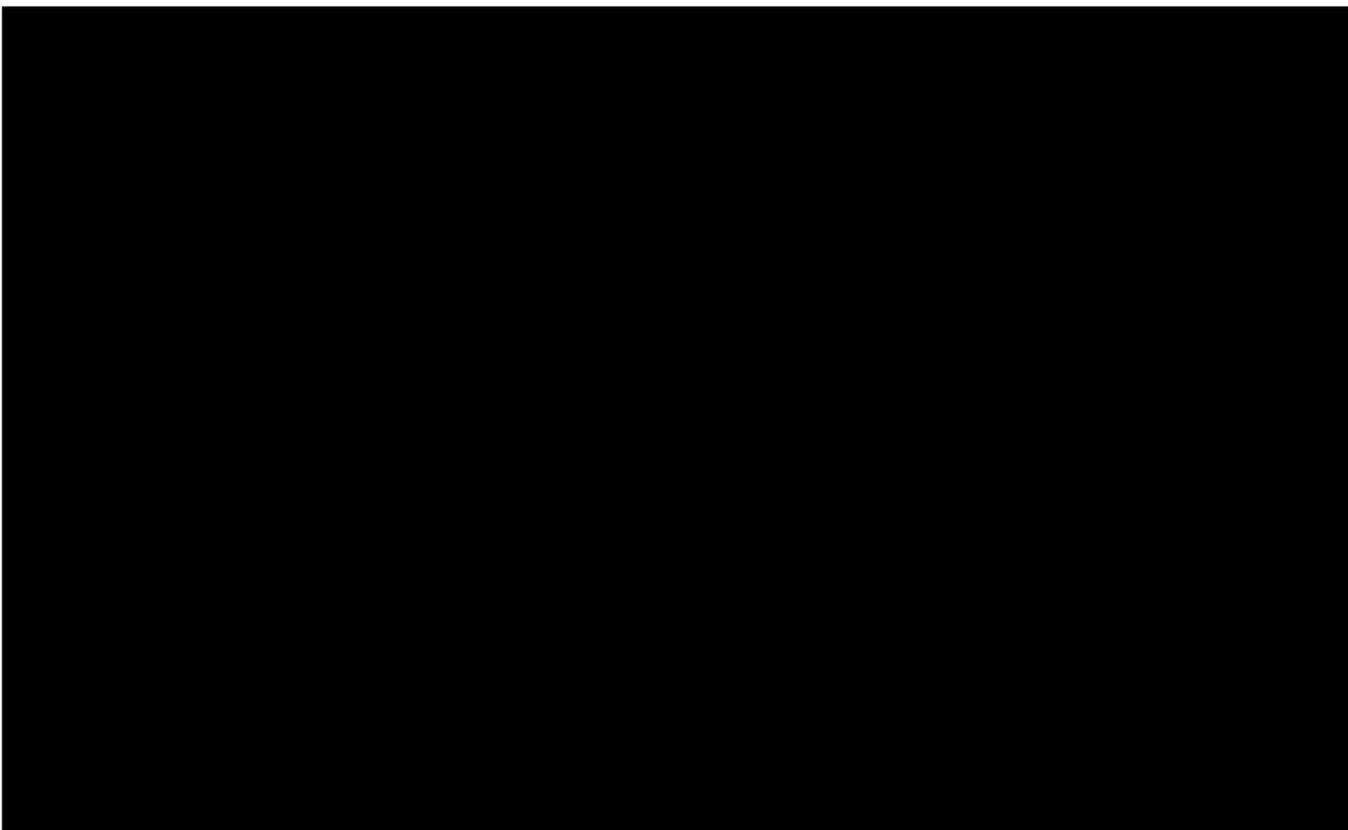


Figure 2 Google Earth overview of incident area with red arrow pointing to pole SAP ID # 100223285.

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Figure 3 Photo taken by responding troubleman showing top of pole and transformer.

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Figure 4 Photo taken by responding troubleman showing approximate 18 X 24 -foot extinguished fire at the base of the pole. According to PG&E's Asset Strategy team, this pole was not considered "bird safe" prior to the ignition incident.

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Figure 5 Photo taken by responding troubleman showing close-up of fire footprint at the base of the pole.

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Figure 6 Photo taken by responding troubleman. No avian protection noted on the pole.

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Figure 7 Photo taken by responding troubleman showing dead bird found near the pole.

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Attachments

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



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