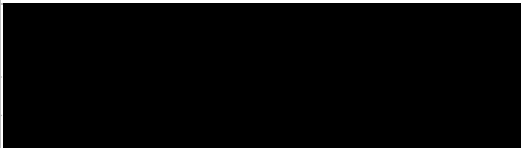




Preliminary Ignition Investigation Report

Ignition Database Index:	2022-1305
Electric Incident Investigation (EII) Number:	N/A
HAWC Incident Name:	Wilder Fire
PG&E Facility Ignition?	Yes
CPUC Reportable Ignition?	Yes
Date & Time of Incident:	August 01, 2022 @ 1614 hours
Street Address:	[REDACTED]
City:	Red Bluff
County:	Tehama
Latitude/Longitude:	[REDACTED]
PG&E Division:	North Valley
High Fire Threat District (HFTD):	Non-HFTD
High Fire Risk Area (HFRA):	No
EPSS Buffer Zone:	Yes
Fire Index Area (FIA):	On the border of 246
Fire Potential Index (FPI) Rating: FIA	R2
Fire Potential Index (FPI) Rating: Circuit	R2
Was there a PSPS event at the time of ignition?	No
Failure Driver:	Utility work/Operation
Failure Sub-driver:	Insulator failure
Circuit:	Tyler 1105
Circuit Protection Zone:	Tyler 11051704
Nominal Voltage:	12kV
PG&E Equipment associated with ignition:	Insulator
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:	<0.25 acres
FAS Field Remarks:	2 NG (No Good) PT (Part) 8 insulators flashed over causing phase to phase flashover. Reframe pole with 8 foot crossarm and install PT 75H fuses for TX
HAWC Summary:	Units responded to a fire at Wilder Road and Cutters Way. Fire is being reported as forward progress stopped with a current size of a small roadside spot fire. EPSS enabled circuit. Tyler 1105 was located within 0.25 miles of the reported location. An outage was reported on the EPSS enabled circuit. No other outages reported. Total customers affected was 834. First on-scene unit reported small roadside spot fire that was

	extinguished by locals. Cancel the balance. IC then requested PG&E to investigate a transformer in the immediate vicinity. Outage was along an EPSS enabled circuit, Tyler 1105 impacting 834 customers (OIS#1770481.) Notifications have been made to DCC, PSS, and HAWC ops. Closing the incident barring any significant changes.
Injuries / Fatalities / Property Damage / Media Attention:	No reported injuries, fatalities, property damage and no known media attention
Weather Conditions:	Temperature 80.6 degrees, Relative Humidity 51%, Winds Speed 10.4 Miles Per Hour (MPH) from the south-southeast, Wind gust- none reported
Red Flag Warning (RFW) / High Wind Warning (HWW):	No Red Flag Warning (RWW) or High Wind Warning (HWW) in effect
911 Standby Relief Time:	18 minutes
OIS #:	1770481
ILIS #:	22-0092266
FAS #:	T005694403, T005694429
Assigned Attorney:	N/A
Assigned Asset Failure Analysis (AFA) reviewer:	
EPSS Engineer:	
EII Ignition Investigator & Phone:	

Executive Summary:

On August 01, 2022 at 1617 hours, a PG&E troubleman was dispatched to a three phase primary overhead segment of the Tyler 1105 12kV circuit near Wilder Road in the community of Red Bluff, North Valley Division. The troubleman was dispatched in response to multiple Smart Meter™ auto generated tags, an outage, and the small roadside fire.

On August 01, 2022 at 1654 hours, PG&E's Hazard Awareness Warning Center (HAWC) reported that fire resources were on scene of a small roadside fire near Wilder Road, Red Bluff, Tehama County that was reported to be extinguished by customers in the area.

The Tyler 1105 was protected by Enhanced Powerline Safety Setting (EPSS) capable device Line Recloser (LR) 1704 at the time of the ignition incident. LR 1704 operated automatically detecting the fault and operating as intended by deenergizing the line.

The troubleman arrived on scene near pole SAP ID # 101525506 and stated that there were two "No Good" (NG) part 8 insulators which appeared cracked and flashed over causing phase- to -phase flashover (see figures # 3 and 4 below) causing a fire along the roadside.

According to the fire report, the fire was suppressed by locals, but CAL FIRE did respond to the incident to take a report and they described the fire size as less than 0.25 acres in size (see figure # 5 below.)

According to PG&E Meteorology, the weather conditions at the time and location of the incident were: Temperature 80.6 degrees, Relative Humidity (RH) 51%, Winds 10.4 Miles Per Hour (MPH) from the south-southeast and no wind gusts reported.

834 customers were affected by the outage and the last customer's service was restored by 1836 hours on August 01, 2022.

The material involved in this ignition event (insulators) were not retained by Applied Technology Service (ATS) for failure analysis testing.





EPSS Analysis:

PG&E's Distribution Engineering team confirmed that the Tyler 1105 and the protective devices on this circuit were enabled with Enhanced Powerline Safety Settings (EPSS) at the time of the August 01, 2022 ignition incident. The table below shows the device ID, brand, and type. LR 1704 is a copper recloser with form 6, Rev 30 type controller set in Alt #3 profile. Sensitive Earth Fault (SEF) Sensitive Ground fault was enabled on the protective device.

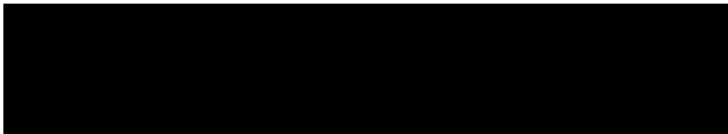
Event downloads were received. This was not a high impedance fault and the device which operated was not equipped with Downed Conductor Detection (DCD).

Line Recloser (LR) 1704 was in Alt 3 mode. The Line Recloser detected the fault in one cycle and tripped as intended. The fault magnitude was 1203 and the operating time was 0.06.

Single Line Diagram:

LEGEND							
	Substation		Fuse		Line Recloser		Area of Interest

Device ID	Brand	Type
1105/2	SEL/GE	IPAC SEL/GE
1704	Cooper	Form 5 – Rev 30



Ignition Impact:

The incident result in a fire less than 0.25 acres in size in the community of Red Bluff, North Valley Division. The fire occurred when insulators cracked and flashed over causing phase- to- phase flashing, starting a small roadside fire. There were no reports of any injuries, fatalities or property damage and no known media coverage. 834 customers were affected by the outage and the last customer’s service was restored by 1836 hours on August 01, 2022.

Sequence of Events:

August 01, 2022

- 1614 hours: Outage start time in OMT
- 1614 hours: LR 1704 open
- 1617 hours: PG&E troubleman dispatched to the Tyler 1105 circuit
- 1618 hours: First Integrated Reporting of Wildland Fire Information (IRWIN) time
- 1647 hours: PG&E troubleman arrives on scene and reports “insulators flashed over causing phase to phase flashing.”
- 1647 hours: PG&E Repair crew dispatched to the Tyler 1105
- 1835 hours: Outage end time in OMT
- 1836 hours: LR 1704 closed

Corrective Notification Associated with Ignition:

This report is preliminary and based on available information as of **February 22, 2023**; event data is subject to change based upon subsequently discovered information.

Electric Corrective tag # 124207216 associated with pole SAP ID # 101525506 was created to replace the damaged insulator, cutout, and hardware framing. Repairs were completed by August 02, 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, 1977	35- foot tall class 5 Douglas fir wood
Inspection:	July 17, 2021	GO 165 Inspection-No compelling or abnormal conditions to note
	March 07, 2016	GO 165 Inspection-No compelling or abnormal conditions to note
Patrol:	April 26, 2022	No abnormal conditions identified
	July 03, 2020	No abnormal conditions identified
Corrective History:	N/A	
Aerial Inspection Records:	N/A	
VM Inspection:	N/A	
EVM Inspection:	N/A	Not in EVM Scope
Equipment Test:	N/A	
Pole Intrusive Test:	January 27, 2023	Pole test and treat-passed with 100% strength
WSIP Inspection:	N/A	

*Incident Location: Pole SAP ID # 101525506

Hazard Barrier Analysis:

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Hazard	Equipment failure				
Target	Cracked insulator				
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 lines.	Inspection or patrol would identify any issues with PG&E equipment.	Yes	Possibly	No compelling or abnormal conditions noted in patrol or inspection records and no mention of cracked insulators
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		Tyler 1105 circuit 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	None

Potential Next Steps / Associated CAP Items:

- None at this time.

Photos and Diagrams of Events:

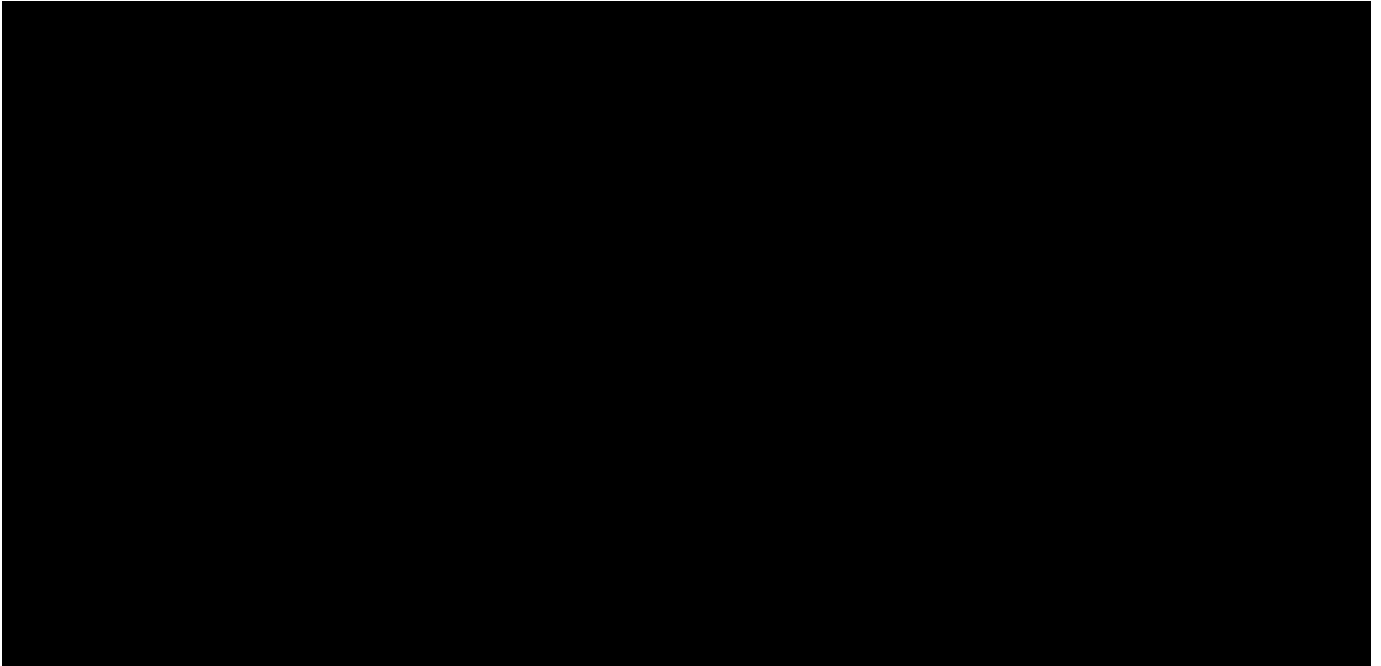


Figure 1 EDGIS diagram of incident area on the Tyler 1105 circuit with red arrow pointing to pole SAP ID # 101525506.

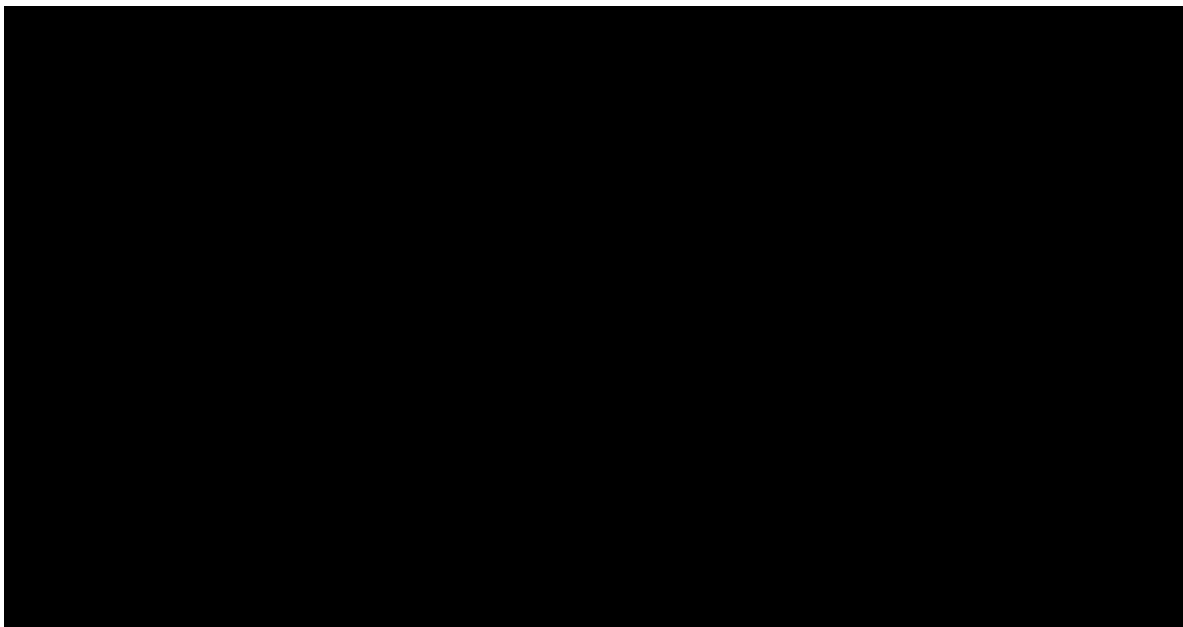


Figure 2 Google Earth overview of incident area with Primary pole SAP # 101525508 and Secondary pole SAP # 101525506 noted.



Figure 3 Photo taken by responding troubleman showing cracked insulator.

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Figure 4 Photo taken by responding troubleman showing two cracked insulators involved in the incident.



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Figure 5 Photo obtained from the CAL FIRE incident report showing the fire footprint area.

Attachments:

Attachments and references are located in the ESA folder, located below:



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