



Preliminary Ignition Investigation Report

Ignition Database Index:	1119
Electric Incident Investigation (EII) Number:	N/A
HAWC Incident Name:	Grocery
PG&E Facility Ignition	Yes
CPUC Reportable Ignition?	Yes
Date & Time of Incident:	July 10, 2022 1117 hours
Street Address:	[REDACTED]
City:	Ukiah
County:	Mendocino
Latitude/Longitude:	[REDACTED]
PG&E Division:	Humboldt
High Fire Threat District (HFTD):	Non-HFTD
Fire Index Area:	154
Fire Potential Index (FPI) Rating:	R4
Was there a PSPS event at the time of ignition?	No
Failure Driver:	Contact from object
Failure Sub-driver:	Balloon contact
Circuit:	Ukiah 1113
Circuit Protection Zone:	Ukiah 1113CB
Nominal Voltage:	12kV
PG&E Equipment associated with ignition:	Conductor- Primary and Secondary
EPSS enabled at time of ignition?	Yes
Fault Type:	Line to Ground
Wire Down (Primary)?	No
MAVF Score	TBD
Lead Agency/Agency Having Jurisdiction:	Ukiah Valley Fire Authority
Fire Size:	0.31 acres
FAS Field Remarks:	Balloons into Primary
HAWC Summary:	Units responded to a fire at [REDACTED]. Fire is being reported as forward progress stopped with a current size of 0.25 acres. EPSS enabled circuit Ukiah 1113 was located within 0.25 miles of the reported location and an EPSS text notification was sent. An outage was reported on the EPSS enabled circuit (s) No other outages reported. Total customers affected was 1209. On outage number 1752539. Notifications have been made to DCC.
Injuries / Fatalities / Property Damage / Media Attention:	No injuries, fatalities or property damage reported. Two Ukiah media news outlets covered the incident

Weather Conditions:	Temperature 86.0 degrees, Relative humidity 35%, wind speed 3.5 MPH out of the east, and no wind gust
Red Flag Warning (RFW) / High Wind Warning (HWW):	No Red Flag Warning or High Wind Warning in effect
911 Standby Relief Time:	34 minutes
OIS #:	1752539
ILIS #:	22-0083641
FAS #:	T005675265, T005675266 (duplicate)
Assigned Attorney:	N/A
EII Ignition Investigator & Phone:	[REDACTED]

Executive Summary:

On July 10, 2022 at 1120 hours, Ukiah Valley Fire Authority was on scene of an 0.31-acre grass fire with a slow rate of spread at [REDACTED] in the community of Ukiah, Mendocino County. Ukiah Valley Fire Authority requested an emergency response and an estimated time of arrival (ETA) from PG&E first responders.

On July 10, 2022 at 1122 hours, a PG&E Troubleman was dispatched to the Ukiah 1113 12kV overhead distribution circuit near North Court Road in the City of Ukiah, Humboldt Division. The troubleman was dispatched in response to reports of arcing wires, circuit breaker 1113/2 open, multiple smart meter auto-generated outages and the vegetation fire which was burning near the base of a pole.

Upon his arrival, the troubleman noted that he would patrol the line back to the circuit breaker. On patrol, the troubleman observed a Mylar balloon melted onto the primary conductor and the single-phase secondary conductor. The troubleman noted circuit breaker 1113/2 open and the fault location as three spans load side of Capacitor Bank # 718. The troubleman also noted balloon fragments at the base of pole SAP ID # 102178810.

The Ukiah Valley Fire Authority extinguished the approximate 0.31-acre fire which they labeled the "Grocery" fire. Fire personnel indicated that they did not retain any pieces of the balloon fragments involved in the ignition. In their initial dispatch response information, the fire department received a notification that balloons were seen floating in a light breeze prior to the incident.

According to PG&E Meteorology, the weather conditions at the time and location of the incident were: Temperature 86.0 degrees, relative humidity 35%, winds 3.5 MPH out of the east, and no wind gusts during R4 conditions.

Initial analysis indicates that the ignition was caused by a metallic-coated conductive Mylar balloon which came in contact with the primary and secondary overhead conductors. The contact caused the line to relay and the balloon to melt onto the primary conductors. The molten balloon material dropped to the ground and ignited the receptive dry fuel bed beneath the pole.

There was no PG&E equipment needing repairs therefore, there was no Electric Corrective (EC) notification tag generated as a result of this incident. 1209 customers were impacted by the outage and the last customer's service was restored by 1322 hours on July 10, 2022.





EPSS Analysis:

The Ukiah 1113 and protective devices on this circuit were enabled with Enhanced Powerline Safety Settings (EPSS) at the time of the July 10, 2022 ignition incident. EPSS was activated for the Ukiah 1113 circuit and automatic devices since July 08, 2022. The table below shows the device ID, brand, and type. Circuit Breaker 1113 operated automatically at 1117 hours to clear the line when it detected a fault (the balloon) on the line.

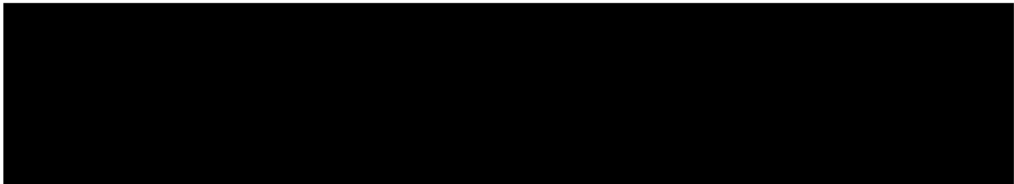
The recorded fault magnitude was 1505 Amps. The fault target or Minimum to trip alarms which came in via SCADA were A to ground fault which indicated a relay operating time of 50.2 ms. There were no partial voltage alarms detected.



Ukiah 1113 – Single Line Diagram and Protective Devices

LEGEND							
	Substation		Fuse		Line Recloser		Area of Interest

Device ID	Brand	Type
CB 1113	SEL351/F60	IPAC



Ignition Impact:

The ignition resulted in a fire approximately 0.31 acres in size in the South State Street area in the community of Ukiah, Mendocino County. The ignition occurred when a metallic balloon contacted the primary line and melted down into the primary and secondary lines. 1209 customers were impacted by the 125-minute outage. Service was restored by 1322 hours on July 10, 2022. There were no reports of any injuries, fatalities, or property damage. Two local Ukiah news media outlets covered the fire.

Sequence of Events:

July 10, 2022

- 1117 hours: Outage start time in OMT, First No Light (FNL)
- 1117 hours: Circuit breaker 1113/2 open
- 1117 hours: First Smart Meter Last Gasp
- 1120 hours: First IRWIN Time
- 1120 hours: Ukiah Valley Fire Authority on scene of a reported vegetation fire near S. State Street
- 1122 hours: PG&E Troubleman dispatched to the Ukiah 1113 circuit
- 1149 hours: Troubleman arrives on scene at the Ukiah 1113 circuit
- 1200 hours: Troubleman patrols the line and reports Mylar balloon into the line three spans load side of 718 on N. Court Rd/State Street. Vegetation fire at the base of the pole put out by fire department. CGC # 216594053083. Hazard cleared. Will patrol main line back to the CB
- 1322 hours: Circuit breaker 1113/2 closed
- 1322 hours: Outage end time in OMT

Corrective Notification Associated with Ignition:

There was no Electric Corrective (EC) tag associated with this incident.

Pending Work:

Type	Number	Description	Priority	Date Identified	Due Date
EC Notification	112147699	Pre-existing tag for pole SAP ID # 102178810 for split secondary crossarm and a loose guy	F	November 08, 2016	April 01, 2021

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, 1951	Class 4 wood pole
Inspection:	August 25, 2021	Crossarm integrity compromised, missing hardware. Guy missing or loose
	October 28, 2016	No abnormal conditions noted
Patrol:	N/A	
Corrective History:	July 21, 2015	Fire reported at the base of the pole. Pole SAP ID # 102178810 had a past inspection from August 15, 2013. Pole was fire damaged.
Aerial Inspection Records:	N/A	
VM Inspection:	N/A	
EVM Inspection:	N/A	
Equipment Test:	N/A	
Pole Intrusive Test:	March 30, 2010	Pole test and treat-passed
WSIP Inspection:	N/A	

*Incident Location: Near pole SAP ID # 102178810.

Hazard Barrier Analysis:

Hazard	Balloon contact				
Target	Balloon 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 lines.	Inspection or patrol would identify any issues with PG&E equipment.	Yes	No	Other than missing hardware and Guy, no abnormal conditions noted in August, 2021

This report is preliminary and based on available information as of **August 05, 2022**; event data is subject to change based upon subsequently discovered information.

					inspection. Ignition was caused by third-party (balloon) contact
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	Circuit Breaker 1113 opened at 1117 hours

Potential Next Steps / Associated CAP Items:

- None at this time.

Photos and Diagrams of Events:

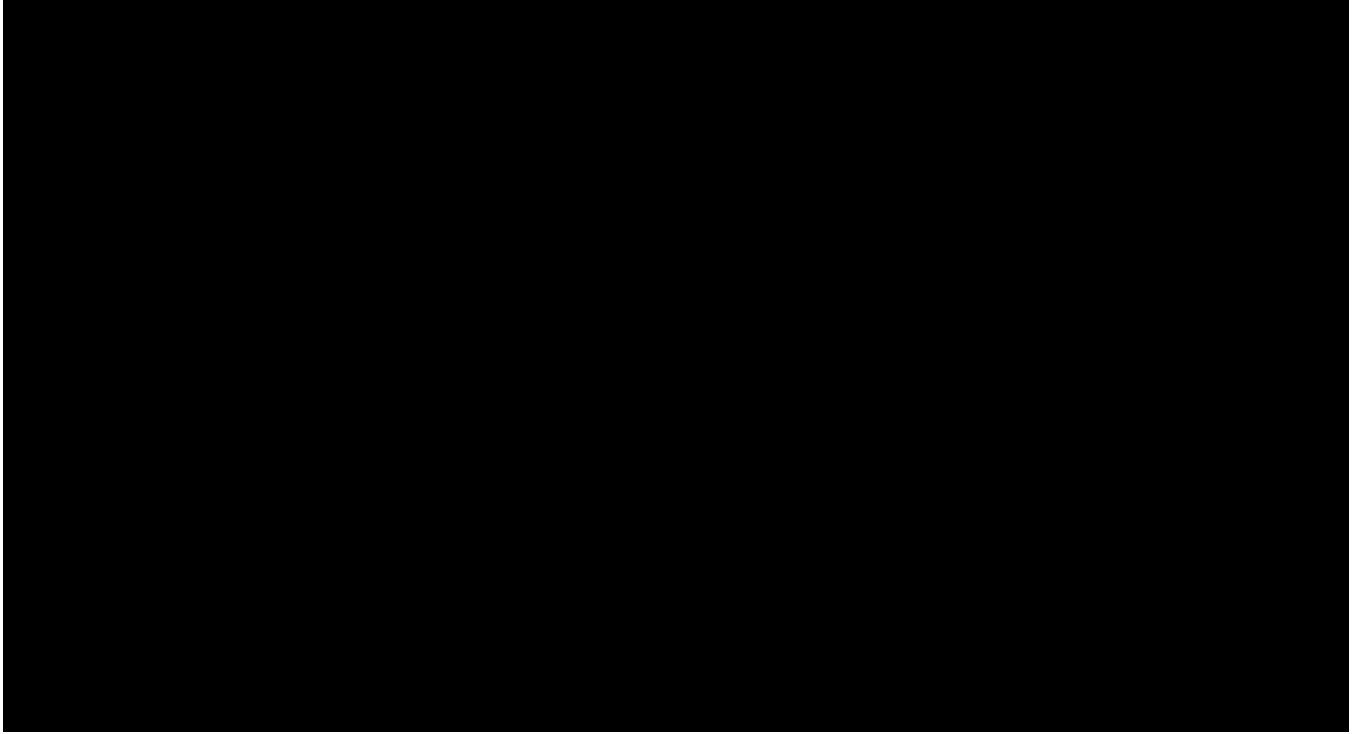


Figure 1 EDGIS overview of Ukiah 1113 incident area with red arrow pointing to pole SAP ID # 102178810.

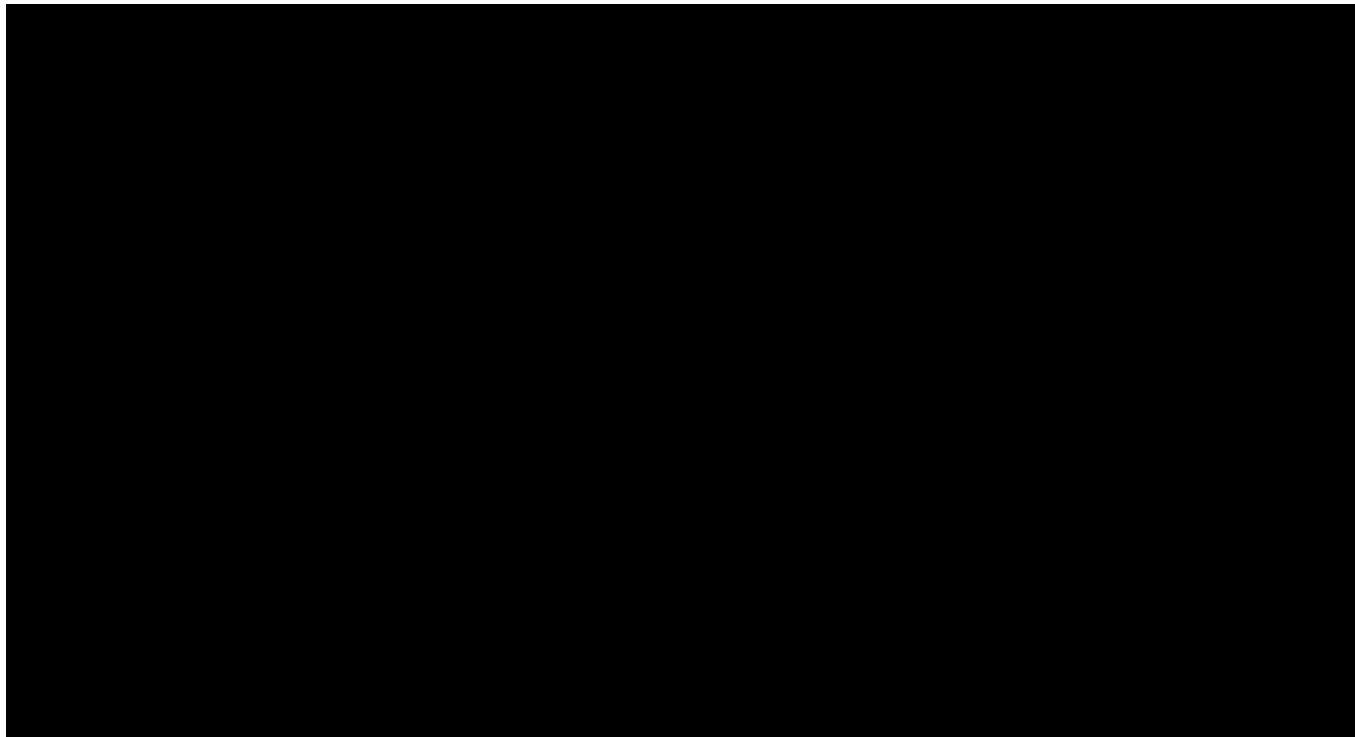


Figure 2 Google Earth overview of incident area with red arrow pointing to pole SAP ID # 102178810.

[UPDATE: VIDEO] VEGETATION FIRE BURNING ON SOUTH STATE IN UKIAH

[July 10, 2022](#) | [Matt LaFever](#) | [Leave a comment](#)



Smoke rising from a vegetation fire burning near the intersection of South State Street and Oak Knoll Road. [Image of the fire from the Alert WildFire webcam]

Figure 3 Article from Menofever which covered the fire incident and photo from PG&E's alert wildfire camera.



Figure 4 Photo taken by responding troubleman showing approximate 0.31-acre fire which was suppressed by the Ukiah Valley Fire Authority.



Figure 5 Photo taken by the responding troubleman showing fire footprint area near the base of pole.



Figure 6 Photo taken by responding troubleman showing close-up of fire footprint area.



Figure 7 Photo taken by responding troubleman showing PG&E asset.



Figure 8 August 25, 2021 GO 165 inspection photo of pole SAP ID # 102178810.



Figure 9 August 25, 2021 GO 165 inspection photos showing fuel bed underneath and top view of pole SAP ID # 102178810.

Attachments:

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

[REDACTED]
[REDACTED]

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