



## Preliminary Ignition Investigation Report

<b>Ignition Database Index:</b>	1186
<b>Electric Incident Investigation (EII) Number:</b>	N/A
<b>HAWC Incident Name:</b>	Reservation
<b>PG&amp;E Facility Ignition?</b>	Yes
<b>CPUC Reportable Ignition?</b>	Yes
<b>Date &amp; Time of Incident:</b>	July 18, 2022 0641 hours
<b>Street Address:</b>	[REDACTED]
<b>City:</b>	Salinas
<b>County:</b>	Monterey
<b>Latitude/Longitude:</b>	[REDACTED]
<b>PG&amp;E Division:</b>	Central Coast
<b>High Fire Threat District (HFTD):</b>	Non-HFTD
<b>High Fire Risk Area (HFRA):</b>	No
<b>Non-Tier Buffer:</b>	No
<b>Fire Index Area:</b>	150 feet outside of FIA 505
<b>Fire Potential Index (FPI) Rating:</b>	R1 for FIA 505
<b>Was there a PSPS event at the time of ignition?</b>	No
<b>Failure Driver:</b>	Utility work/Operation
<b>Failure Sub-driver:</b>	Jumper failure
<b>Circuit:</b>	Reservation Road 1102
<b>Circuit Protection Zone:</b>	Reservation Road 11023032
<b>Nominal Voltage:</b>	12kV
<b>PG&amp;E Equipment associated with ignition:</b>	Jumper
<b>EPSS enabled at time of ignition?</b>	Yes
<b>Fault Type:</b>	Open circuit
<b>Wire Down (Primary)?</b>	No
<b>MAVF Score</b>	35.7
<b>Lead Agency/Agency Having Jurisdiction:</b>	CAL FIRE
<b>Fire Size:</b>	0.25 acres
<b>FAS Field Remarks:</b>	Tag in for crew to repair open jumper @ 3032
<b>HAWC Summary:</b>	Resources responded to a vegetation fire at the intersection of Reservation Road and Davis Road. The fire had forward progress stopped at 0.25 acres. There was an outage in the immediate area impacting approximately 109 customers on the Reservation Road 1102, OIS # 1759149, 1759148, EPSS enabled circuit—Reservation Road 1102. Notification have been made to PSS, DCC, GCC and Gas control.
<b>Injuries / Fatalities / Property Damage / Media Attention:</b>	No injuries, fatalities or property damage and no known media coverage

<b>Weather Conditions:</b>	Temperature 51.3 degrees, Relative Humidity 93%, Winds speed 0.1MPH out of the South, South-west, Wind gust of 1.1 MPH
<b>Red Flag Warning (RFW) / High Wind Warning (HWW):</b>	No Red Flag Warning or High Wind Warning in effect
<b>911 Standby Relief Time:</b>	19 minutes
<b>OIS #:</b>	1759149
<b>ILIS #:</b>	22-0086493
<b>FAS #:</b>	T005682200, T0056822371, T0050682241
<b>Assigned Attorney:</b>	N/A
<b>EII Ignition Investigator &amp; Phone:</b>	
<b>AFA reviewer</b>	
<b>EPSS</b>	
<b>ATS</b>	N/A

### Detailed Description of Events:

On July 18, 2022 at 0946 hours, a PG&E Troubleman was dispatched to the Reservation Road 1102 12 kV three-phase overhead distribution circuit near Creekside Terrace in the community of Salinas, Monterey County. The troubleman was dispatched in response to an auto generated Smart Meter™ tag for an area outage.

The Reservation Road Primary line was protected by an Enhanced Powerline Safety Setting (EPSS) capable device at the time of the ignition incident. Line Recloser (LR) 3032 operated as designed opening at 0941 hours to de-energize the line.

Upon his arrival at approximately 1025 hours at pole SAP ID # 101724755, the troubleman observed that the jumper failed and burned open, load side of Reservation Road. The troubleman also noted an approximate 0.25 acre fire which burned in the brush beneath the pole (see figure # three below). The troubleman stated that the jumper broke and opened at the primary compression splice of the line recloser which created an arc and a spark that fell igniting the dry grass beneath the pole.

The troubleman indicated there was no evidence of corrosion at the jumper and that the pole did not have any bird or animal guards on it. The troubleman did not find any evidence of a burned animal or bird beneath the pole which could have been the source of the ignition.

CAL FIRE responded to the fire and reported a fire burning in grass and brush at a slow rate of spread and approximately 0.25 acres in size. The fire was suppressed by CAL FIRE and there was no property damage or injuries associated with the incident.

According to PG&E Meteorology, the weather conditions at the time and location of the incident were: Temperature 51.3 degrees, Relative Humidity 93%, wind speed 0.1 Miles Per Hour (MPH) out of the South, South-West, wind gust of 1.1 MPH during R1 conditions.

As a result of this incident, one priority “A” Electric Corrective (EC) tag # 124107229 was created to replace the jumper, install bird guards, and center phase covers. Repairs were completed on July 18, 2022. There were no EC tags associated to this pole that were open or pending prior to this ignition and the failed equipment was not retained by the troubleman for failure analysis testing.

The outage impacted 109 customers and the last customer’s service was restored by 1203 hours on July 18, 2022.

### Ignition impact:

The ignition resulted in a fire approximately 0.25 acres in size in the Salinas community of Monterey County. The fire was caused by a failed jumper which burned open and burned the receptive fuel bed beneath the pole. There were no reports of any injuries, fatalities or property damage and no known media coverage. 109 customers lost service due to this incident and the last customer's service was restored by 1203 hours on July 18, 2022

### Sequence of Events:

July 18, 2022

- 0845 hours: First Smart Meter™ Last Gasp time
- 0941 hours: First No Light (FNL)
- 0941 hours: Line Recloser # 3032 opens
- 0942 hours: LR 3032 sends trip signal
- 0945 hours: Outage start time in Outage Management Time (OMT)
- 0946 hours: PG&E troubleman dispatched to the Reservation Road 1102 circuit
- 0954 hours: First Integrated Reporting of Wildland Fire Information (IRWIN) time
- 1025 hours: PG&E troubleman arrives on scene to the Reservation Road 1102 circuit
- 1026 hours: Troubleman reports that a jumper failed and burned open
- 1116 hours: PG&E repair crew on scene at the Reservation Road 1102 circuit
- 1203 hours: Line Recloser 3032 closed
- 1203 hours: Outage complete time in OMT

## EPSS Analysis:

PG&E's Distribution Asset Planning team confirmed that the Reservation Road Primary circuit and Line Recloser (LR) 3032 were enabled with EPSS at the time of the ignition incident. Per engineering, line Recloser 3032 worked as designed and operated automatically. This was not a high impedance fault event.

Line Recloser (LR) 3032 was set to alternate 3, EPSS mode profile with no Downed Conductor Detection (DCD) setting. LR 3032 first picked up on Sensitive Ground Fault (SGF) Target with approximately 22 Amps but as the fault current rose to above the 80 Amp threshold, the LR eventually tripped instantaneously on 51N/50N (51N Ground time over current 50N Ground instantaneous over current) targets. The total time to trip from detection to trip was 0.1375 seconds. Once the device picked up on 51N/50N, the signal was sent in within 14 milliseconds (ms).

### Chronological Order of Events:

Device picked up on 50GS @ 9:42:39.5719

Device picked up on 51N/50N @ 9:42:39.7083

Device sent Trip signal @ 9:42:39.7094

Total Response Time = 0.1375 S – This is from when 50GS picked to trip

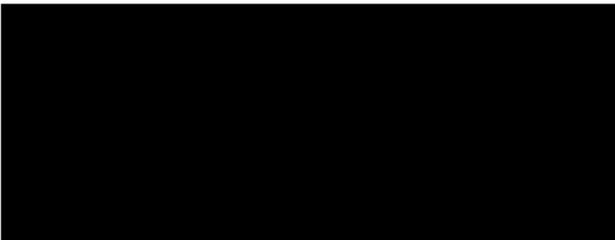
Total Response Time – From when 50N/51N Picked up – 14ms



## Reservation Road 1102 – Single Line Diagram and Protective Devices

LEGEND	
	Substation
	Fuse
	Line Recloser
	Area of Interest

Device ID	Brand	Type
1102/2	SEL351/F50	IPAC
Recloser 3032	Form 6	NOVA – R30 – PV4



### Unplanned Outages

Salinas			
Circuit	882731102, RESERVATION ROAD-1102	Event Log	22-000483
Type	Unplanned	Weather	Clear,32-90F
Customers	CE50 109 CE80 0 ADJ.CE50 109 Intel 109	Customer Minutes	388 15478 Mon 0 Fri Sat 15478 6400 142
Active	NO	Fault Type	Open Circuit
Interval	Sustained	Action Required	No
Equipment	BURNED OPEN JUMPER	Construction Type	OH
Equipment Type	Jumpers	Outage	1750140 PM Order#: 45383205
Equipment Condition	Jumper Burned Open	Targets	
Crew Notified Time	07/18/22 11:12	Supervisor Notified	No
Equipment Address	FORM 6 CONTROLER RESERVATION RD, 0.8 MI E/O DAVIS RD	Fire Mitigation	No
Fault Location	[REDACTED] open jumper @ 3032	EPSS	Y
Previous Switching			
Details	US OF LR, BURNED OPEN JUMPER	Wire Down Energized	No
Action Description		No Access Reason	
Cause	Equipment Failure/Involved, Overhead	# of Operations	
Multil Damage Location No		Created By	[REDACTED]
Counter Read		Last Updated By	SMBATCH_PO
Outage Level	Distribution Circuit	Reviewed By	Not Required
FNL	07/18/22 09:41	Reviewed By Date	07/18/22 12:21
End Date	07/18/22 12:00		
Date	Description	Customers Restored	
07/18/22 09:41	LINE RECLOSER 3032 OPEN	0	
07/18/22 12:00	LINE RECLOSER 3032 CLOSED	100	

### Asset Failure Analysis:

No Asset Failure Analysis (AFA) engineer was assigned to perform an Extent of Condition (EOC) on this ignition incident since it occurred in a Non-HFTD. An AFA engineer did review the PIIR report and noted that there was an anomaly in the jumper construction on this pole with three different types of jumper construction (see figure five below). Although there was different types of jumper construction, there was nothing that would have been caught or flagged in the GO 165 inspection.

### Corrective Notification Associated with Ignition:

One priority “A” Electric corrective (EC) tag # 124107229 associated to pole SAP ID # 101724755 was created as a result of this incident to replace the burnt jumper. On July 18, 2022, a PG&E repair crew replaced the burnt up jumper connection, installed bird guard and center phase covers.

### 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				

### Asset Info & Most Recent Inspections and Tests:

Info / Inspection	Most Recent Date	Findings
Install Date:	January 01, 1995	Class 2, 45 foot wood pole
Inspection:	July 01, 2021	GO 165 Inspection No compelling or abnormal conditions noted
	March 09, 2016	GO 165 Inspection No compelling or abnormal conditions noted
Patrol:	March 10, 2022	No abnormal conditions identified
	February 25, 2020	No abnormal condition identified
Corrective History:	September 02, 2017	EC # 113215099 overgrown tree/vine-remove. Completed
Aerial Inspection Records:	N/A	
VM Inspection:	N/A	
EVM Inspection:	N/A	
Equipment Test:	N/A	
Pole Intrusive Test:	July 05, 2017	Pole Test and Treat (PTT) Passed
WSIP Inspection:	April 10, 2019	No compelling or abnormal conditions noted

[Pole SAP ID # 101724755](#)

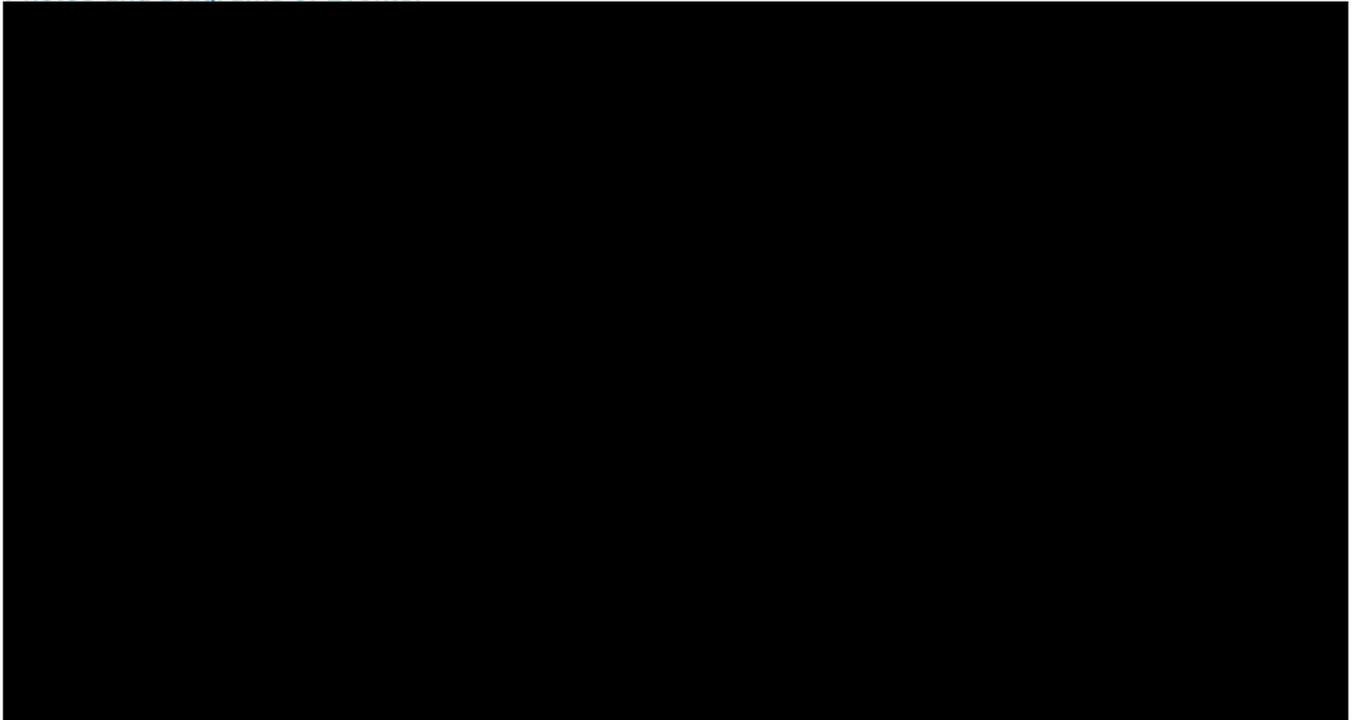
Hazard Barrier Analysis:

Hazard	Equipment Failure				
Target	Jumper Failure				
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	No compelling or abnormal conditions noted in either 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.	Yes	No	No compelling conditions noted in 2019 WSIP inspection
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	Line Recloser 3032 at 0941 hours opening and de-energizing the line

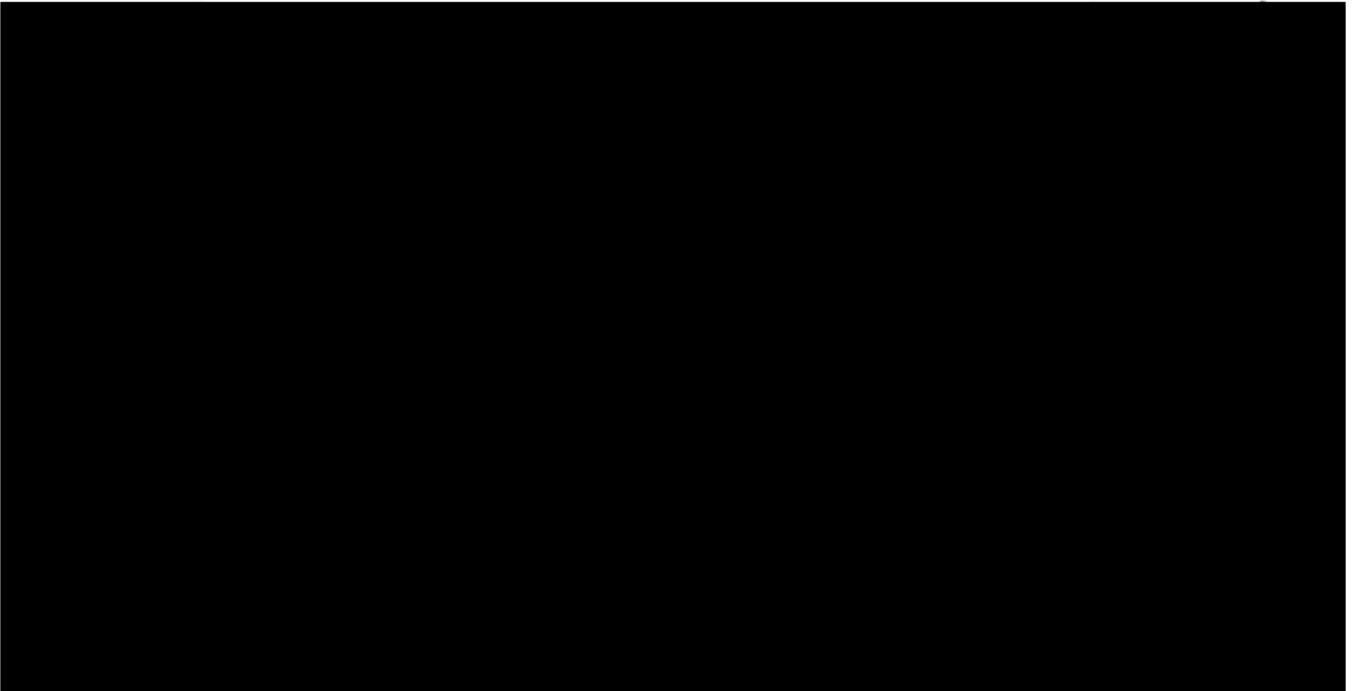
Corrective Actions:

None at this time.

Photos and Diagrams of Events:



*Figure 1 Google Earth map of incident area with yellow arrow pointing to pole SAP ID # 101724755.*



*Figure 2 EDGIS overview of incident area with red arrow pointing to pole SAP ID # 101724755.*



*Figure 3 Photo taken by responding troubleman showing approximate 0.25 acre fire beneath the pole.*



*Figure 4 Photo taken by responding troubleman showing close up of top portion of the pole.*

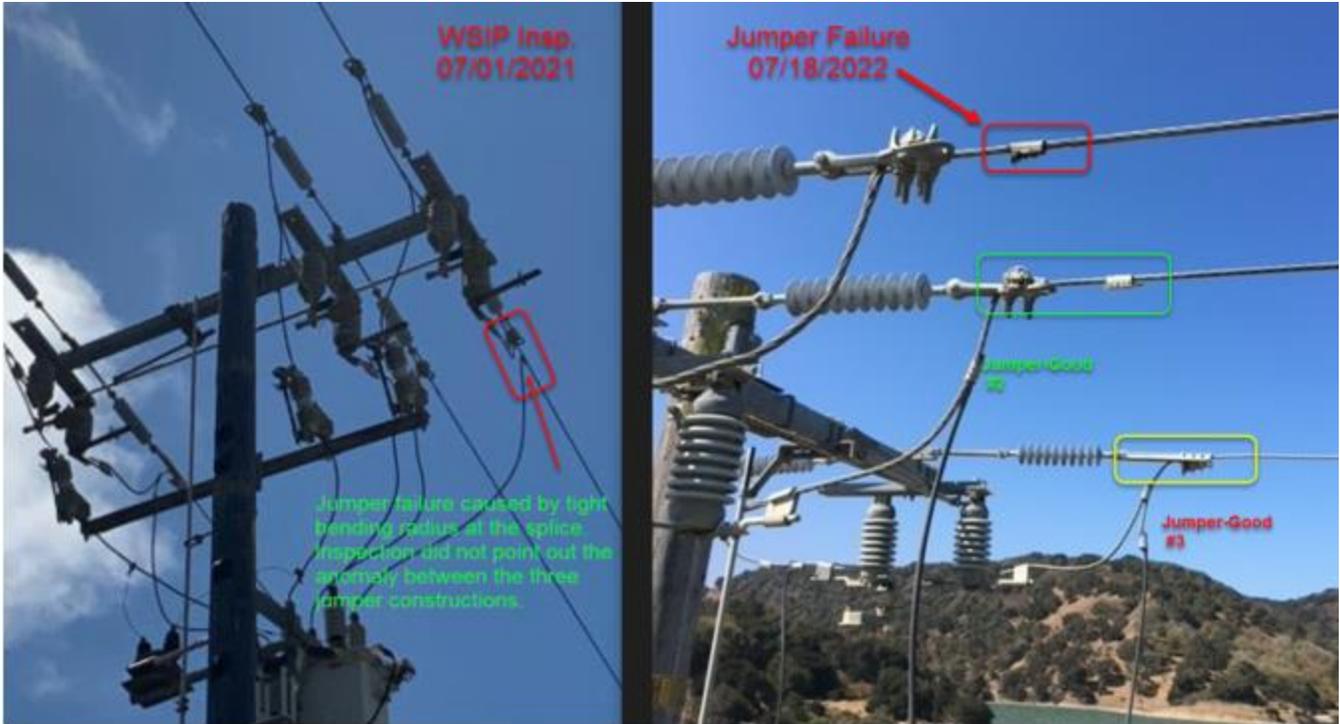


Figure 5 Diagram from Asset Failure Analysis showing red arrow pointing to tight bending radius noted from July 2021 WSIP inspection on the left and red arrow pointing to location of jumper failure in July 2022 on the right.



*Figure 6 Photo taken by responding troubleman showing close-up of top portion of the pole.*

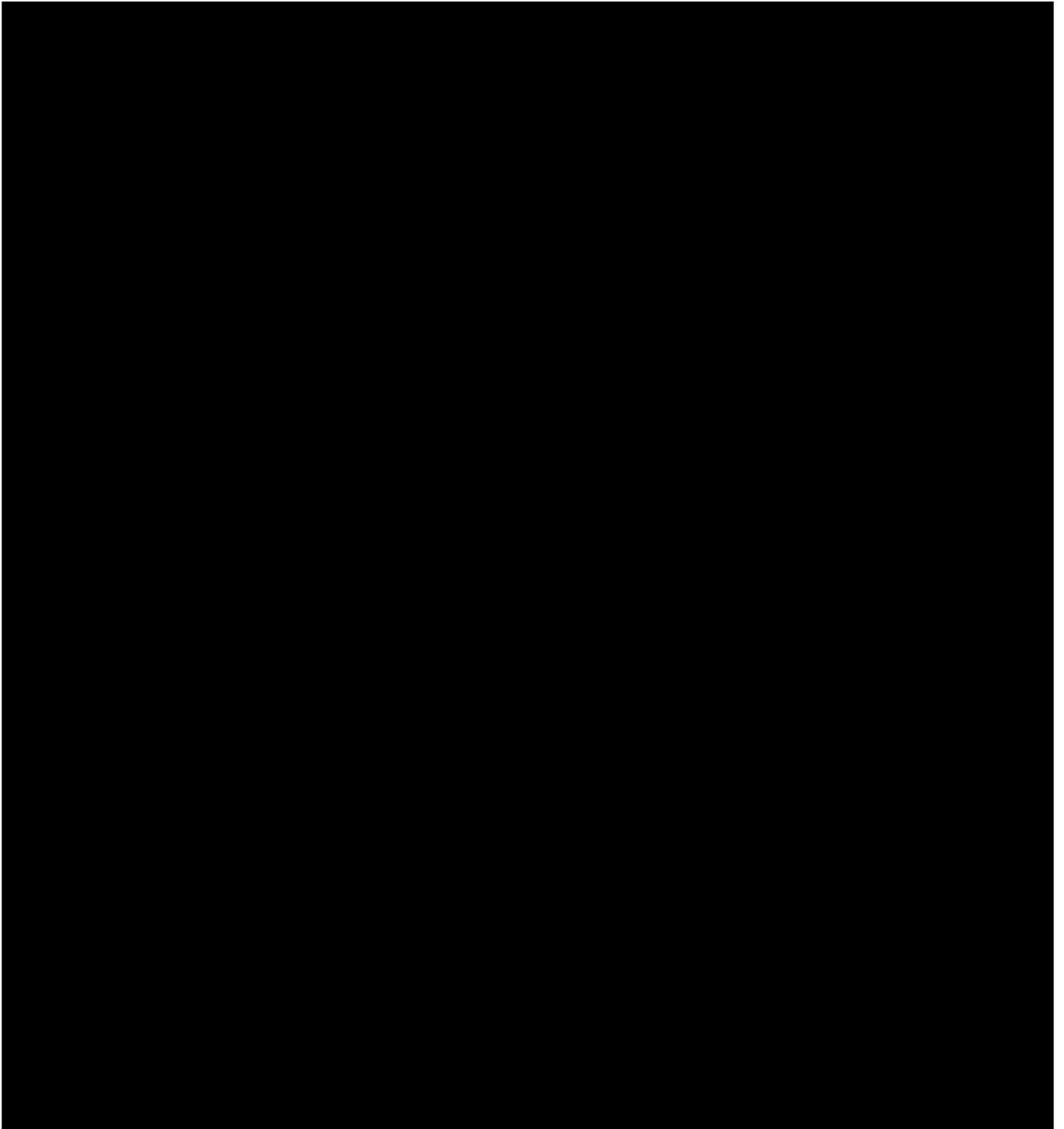


*Figure 7 Photo taken by responding troubleman of crossarm and lines. Photo is showing three different types of jumper construction.*

This report is preliminary and based on available information as of **December 19, 2022** event data is subject to change based upon subsequently discovered information.



*Figure 8 Photo taken by responding troubleman showing another angle of pole SAP ID # 101724755 and firefighters on scene in the background.*



*Figure 9 Diagram included in EC tag showing repairs made to pole SAP ID # 101724577.*

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*Figure 10 July 01, 2021 pre-ignition incident GO 165 inspection photo.*

**Attachments:**

[Redacted]

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