



## Preliminary Ignition Investigation Report

<b>Ignition Database Index:</b>	816
<b>Electric Incident Investigation (EII) Number:</b>	N/A
<b>Assigned Attorney</b>	N/A
<b>HAWC Incident Name:</b>	N/A
<b>PG&amp;E Facilities Possibly Attributable:</b>	Secondary Crossarm
<b>CPUC Reportable?</b>	Yes
<b>Date &amp; Time of Incident:</b>	06/16/2021 18:05 hours
<b>Latitude/Longitude</b>	37.07743, -122.07866
<b>Street Address:</b>	130 Clement Street
<b>City:</b>	Ben Lomond
<b>County:</b>	Santa Cruz
<b>PG&amp;E Division:</b>	Central Coast
<b>High Fire Threat District:</b>	Tier 3
<b>Fire Index Area:</b>	520
<b>Fire Potential Index (FPI) Rating:</b>	R3
<b>Was there a PSPS event at the time of ignition?</b>	N/A
<b>Asset Type Involved:</b>	Secondary Wooden Crossarm
<b>Circuit:</b>	Camp Evers
<b>Circuit Protection Zone:</b>	Camp Evers-2105-LR10728
<b>Nominal Voltage:</b>	21 KV
<b>Lead Agency/Agency Having Jurisdiction:</b>	CAL Fire
<b>Fire Size:</b>	0.25 Acres
<b>Fire Containment Status:</b>	100 %
<b>FAS Field Remarks:</b>	EC tag made to replace rotten, secondary crossarm.
<b>HAWC Notification (epage, Incident Report):</b>	N/A
<b>Injuries / Fatalities / Property Damage:</b>	N/A
<b>Weather Conditions:</b>	Calm, Clear
<b>Estimated Wind:</b>	N/A
<b>Red Flag Warning (RFW):</b>	No Red Flag Warning in effect at time of incident.
<b>High Wind Warning (HWW):</b>	No High Wind Warning in effect at time of incident.
<b>Media Attention:</b>	N/A
<b>911 Response Time</b>	N/A
<b>OIS #:</b>	1375662
<b>ILIS #:</b>	21-0075261
<b>FAS #:</b>	T005317137
<b>EII Ignition Investigator &amp; Phone:</b>	

## Executive Summary

On June 16<sup>th</sup>, 2021 at 18:05 hours. a PG&E Troubleman was dispatched to the Camp Evers 2105 21 KV Distribution Circuit near Clement Street in the community of Ben Lomond in Santa Cruz County in response to a report of a broken, partially hanging crossarm and a possible vegetation fire. Upon his arrival in the area, the troubleman noted a decayed, broken Secondary crossarm and what he described as an approximate 0.25-acre grass fire at the base of the pole. CAL Fire responded to and extinguished the fire at the base of the pole.

Initial analysis indicates that the rotten secondary crossarm deteriorated to the point of failure, causing an ignition. After the ignition was extinguished on 6/16/2021, an EC tag was created to replace the rotten secondary crossarm and insulator and repair the conductor. The emergency repairs were completed on 06/17/2021 and all customers restored by 0358 hours.

The crossarm associated with this ignition was associated with a previous, outstanding corrective notification created in the field on 08/19/2019 with a required completion date of 02/19/2020 to replace the decayed/rotten crossarm, the broken molding and improperly/incorrectly installed conductor connection. This corrective notification was reassessed on 09/10/2020 (after being permitted and ready for construction in April 2020) and the crew lead requested that the work be expedited before the 2021 fire season.

Three immediate spans up and downstream of the ignition location were identified for replacement in 2020.

## Ignition Impact

This ignition resulted in a vegetation fire 0.25 acres in size in the Clement Street area in the community of Ben Lomond. The Wildfire ignited due to a rotten and decayed secondary, wooden crossarm failing and igniting the light, flashy fuels below the pole. There were no structures damaged because of this ignition, no media attention and no injuries or fatalities were reported.

## Sequence of Events

June 16<sup>th</sup>, 2021

- 18:05 Hours FNL (First No Light.)
- 18:08 Hours PG&E Troubleman dispatched to the Camp Evers 2105 circuit.
- 18:32 Hours PG&E Troubleman reports broken secondary crossarm, needs crew to replace.
- 19:45 Hours PG&E Troubleman creates an EC tag to replace the secondary crossarm.
- 20:28 Hours PG&E Repair crew dispatched.
- 23:14 Hours PG&E Repair crew arrives at scene.

June 17<sup>th</sup>, 2021

03:58 hours. Outage end time.

04:27 Hours. PG&E Repair crew clears the scene.

### Corrective Notification Associated with Ignition

One priority "A" EC notification tag was created because of this incident; Notification # 121550513 associated with SAP # 101676591 to replace the rotten secondary crossarm, replace insulators and repair the conductor. The repair crew identified a bad transformer during the repair and replaced the transformer in addition to the repair work associated with the ignition. The recommended repairs were completed on 06/16/2021.

### Pending Work

Type	Number	Description	Priority	Date Identified	Due Date
EC Notification	117777611	Replace rotten crossarm, high sign, molding, conductor, connector	A	08/19/2019	08/30/2021
COE Notification	None				
LC Notification	N/A				
Veg Work Order	None				

Please note this may not include pending major program or project work at the incident location.

### Asset Info & Recent Inspections and Tests

Info / Inspection	Most Recent Date	Findings
Install Date:	01/01/1957	
Inspection:	09/10/2020	"Pole is in same condition as previous inspection."
	08/19/2019	Replace rotten secondary, High sign, molding, conductor.
Patrol:	08/19/2019	Same as above.
	05/30/2018	Same as above.
VM Inspection:	N/A	
Equipment Test:	N/A	
Pole Intrusive Test:	N/A	
WSIP Inspection:	02/07/2019	Tree clearance needed, trim.

\*Incident Location: SAP ID: 101676591

## Frequency of Occurrence

The cause of the ignition that occurred on June 16<sup>th</sup>, 2021 on the Camp Evers circuit was attributable to a failed crossarm. The table below illustrates the frequency of occurrence of ignitions related to crossarms occurring in both Non-HFTD and HFTD areas. Thus far in 2021, there have been 5 ignitions attributed to crossarm failure as the sub-driver in a Non-HFTD and 3 occurring in a HFTD.

Crossarm Failures		
Year	Ignitions in Non-HFTD-Non-CPUC reportable.	Ignitions in HFTD-CPUC reportable.
2014	No data	No data
2015	5	5
2016	8	8
2017	5	12
2018	1	2
2019	1	22
2020	2	0
2021	5	3

*2021 frequency of occurrence data collected from completed ignitions within the Ignition Database on 6/23/2021*

PG&E has identified 4 additional PG&E attributable, CPUC Reportable ignitions caused by facilities on the Camp Evers 2105 circuit (the ignition subject to this report is included in the table below in grey). 3 of the 4 ignitions were caused by vegetation contact; the remaining ignition was caused by a service failure.

PG&E Attributable, CPUC Reportable Ignitions – CAMP EVERS 2105						
Index No#	Ignition Date	Fire Size	Suspected Initiating Event	HFTD	Fire Latitude	Fire Longitude
20160314	9/25/2016	<0.25	Vegetation	Tier 3	37.0993	-122.116
20180458	7/10/2018	<0.25	Equipment - PG&E - Service Drop	Tier 3	37.085	-122.074
20180732	8/31/2018	<0.25	Vegetation	Non-HFTD	37.0827	-122.095
20210049	1/19/2021	<0.25	Vegetation	Tier 3	37.05376	-122.044
20210816	6/16/2021	<0.25	Equipment - PG&E - Crossarm	Tier 3	37.07743	-122.079

## Potential Exposure

The Camp Evers 2105 circuit has 1676 open corrective notifications associated with 1541 unique pole locations. There are 1290 corrective notifications with Object Codes associated to common ignition drivers. The table below illustrates pending corrective work past due, due within 6 months, and due greater than 6 months for object codes commonly associated with ignition events. 886 of these corrective notifications are passed due.

<b>Open Notifications – Associated with Common Ignition Drivers – CAMP EVERS 2015</b>				
<b>Object/Damage Code</b>	<b>Past Due</b>	<b>Within 6 Months</b>	<b>Greater than 6 Months</b>	<b>Grand Total</b>
Animal Mitigation	2			2
Bird Protection	2	1	1	4
Conductor	56	34	7	97
Connector	73	8	4	85
Crossarm	55	11		66
Cutout	1		1	2
Ground	11	10	37	58
Guy	109	29	61	199
Insulator	4	1		5
LAPP Insulator	5			5
Pole	391	55	14	460
Recloser/Sectionalizer	1			1
Switch/J-Box		1		1
Tie Wire	5	3	1	9
Transformer	15	1	1	17
Transformer - Padmount	1			1
Tree/Vine	154	103	18	275
Under-Arm Bus	1		2	3
<b>Grand Total</b>	<b>886</b>	<b>257</b>	<b>147</b>	<b>1290</b>

## Potential Next Steps

- **Past Due Corrective Work:** Consider a project to expedite completion of past due corrective work on Camp Evers 2105.
- **Corrective Tag Cancellation Process:** The pre-existing crossarm replacement notification (117777611) is still open. Close process gap of corrective tags that are rendered obsolete due to emergency replacement.
- **Reassessment of QA/QC procedures for FSRs:** The pre-identified corrective notification associated with this crossarm was identified in a field safety assessment as corrective work than needed to be completed prior to the 2021 fire season. At the time of assessment, the notification was permitted and ready for construction.

## Photos and Diagrams of Events



ED GIS Diagram of Clement St. SAP # 101676591



Photo of rotten, deteriorated crossarm.



Upper portion of pole SAP # 101676591.



Pole and fuel bed below.



Approximate 0.25 acres burned at base of pole.



2019 WISP inspection photo

## Attachments

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

[REDACTED]

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