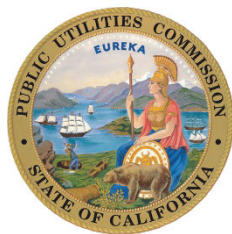


Docket : A.23-08-013
Exhibit Number : CA-02-SA
Commissioner : Alice Reynolds
ALJs : Larsen
Witness : Louie



PUBLIC ADVOCATES OFFICE
CALIFORNIA PUBLIC UTILITIES COMMISSION

Supporting Attachments
to
Testimony on Prudence of Operations
for
Thomas Fire and Debris Flow
Cost-Recovery Application

Prior History of Utility-Related Wildfires

PUBLIC

San Francisco, California
June 6, 2024

SCE's Response to
CalAdvocates-A2308013-22
Question 11

Southern California Edison
A.23-08-013 – Thomas Fire Cost Recovery

DATA REQUEST SET Cal Advocates - SCE - A 2308013 - 22

To: Cal Advocates
Prepared by: Jose Moran
Job Title: Senior Advisor, Claims Investigations
Received Date: 3/13/2024

Response Date: 3/27/2024

Question 11:

Please provide a list of wildfires in the period from 1998 through 2017 where either SCE or a fire agency determined that SCE's equipment was likely responsible for igniting the fire, and where one or more of the following criteria applies:

- The fire burned at least 100 acres,
- The fire damaged or destroyed five or more structures,
- The fire caused any serious injuries or fatalities, or
- SCE incurred liabilities exceeding \$5 million.

Provide a list of such wildfires in Excel format. For each fire, list the following information in separate columns:

- a) Date the fire ignited.
- b) Name of the wildfire, if it was named.
- c) The entity that made the determination that SCE's equipment was likely responsible for igniting the fire.
- d) Number of acres burned.
- e) Number of structures damaged or destroyed.
- f) Number of serious injuries.
- g) Number of fatalities.
- h) Financial liabilities that SCE incurred.
- i) Proceeding in which SCE sought recovery of costs related to the wildfire, if applicable.
- j) Whether the CPUC issued a citation or other enforcement action related to the wildfire (yes/no).

Response to Question 11:

CONFIDENTIAL

**The Attachment(s) Are Marked Confidential In Accordance With Applicable Law and Regulation.
Basis for Confidentiality In Accompanying Confidentiality Declaration.**

Public Disclosure Restricted.

The attached Excel spreadsheet provides information for fires that ignited from 1998 through December 4, 2017.¹ In order to gather this information, I first reviewed SCE's CPUC-required Electric Safety Incident Reporting (ESIR) records. The criteria for an ESIR do not exactly match

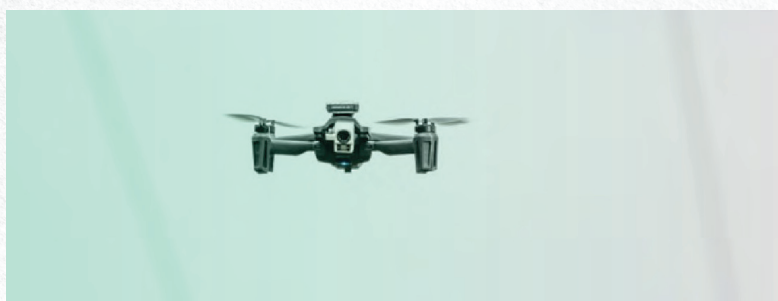
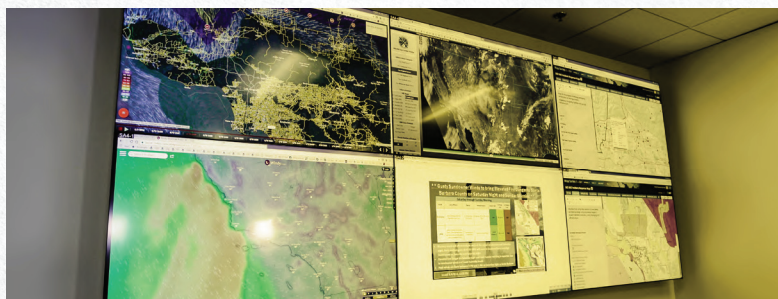
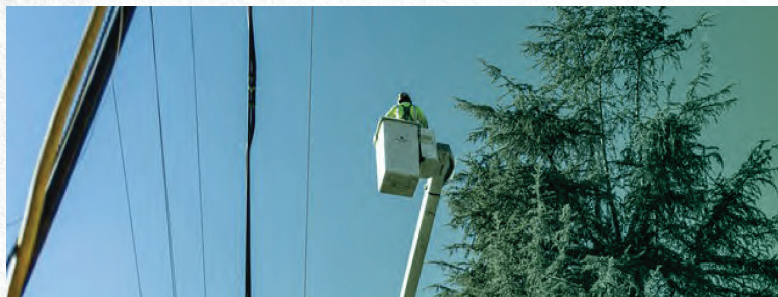
¹ SCE notes that the information provided for purposes of responding to this data request should not be construed in any manner, directly or indirectly, as an admission of any wrongdoing or liability on the part of SCE. Additionally, even where an Authority Having Jurisdiction (AHJ) has issued a report on the cause, SCE may dispute the conclusions of such report.

the criteria set forth in this data request. Therefore, there could be wildfires responsive to this question that did not meet the established criteria for an ESIR at the time. SCE does not have a repository of historical records of fires prior to 2014 other than its ESIR records. I also reviewed records regarding SCE's CPUC-reportable ignitions per D.14-02-015, for which SCE has additional fire ignition data from 2014-2017.

With respect to parts (c)-(g), for fires that occurred prior to 2006, those claims were generally processed via paper and, pursuant to SCE's document retention policy, SCE no longer has all such records. SCE has provided responsive data where available. With respect to part (h), financial liabilities that SCE incurred, SCE has provided total aggregate settlement numbers with third parties, if any. These numbers may include amounts paid by insurers on SCE's behalf.

SCE's 2023-2025 WMP,
Table 5-4 Catastrophic
Electrical Corporation
Wildfires

2023-2025 WILDFIRE MITIGATION PLAN



Docket: 2023 to 2025 Electrical Corporation Wildfire Mitigation Plans Docket#: 2023-2025-WMPs

MARCH 27, 2023



Table 5-4 - Catastrophic Electrical Corporation Wildfires

Ignition Date ⁴⁰	Fire Name ⁴⁰	Official Cause ⁴¹	Fire Size (Acres) ⁴⁰	# of Fatalities ⁴⁰	# of Structures Destroyed and Damaged ⁴⁰	Financial Loss (US\$) ⁴²
10/20/2007	RANCH	USFS opined fire caused by SCE equipment	> 58,000	0	9 Structures Damaged or Destroyed	Data not available
11/14/2008	SAYRE	USFS opined fire caused by SCE equipment	11,262	0	604 Structures Destroyed / 147 Structures Damaged	Data not available
02/06/2015	ROUND	CAL FIRE opined fire caused by SCE equipment	7,000	0	43 Structures Destroyed / 5 Structures Damaged	Data not available
08/18/2016	REY	USFS opined fire caused by SCE equipment	32,606	0	5 Structures Destroyed	Data not available
12/04/2017	THOMAS/ KOENIGSTEIN	CAL FIRE & VCFD opined that fires caused by SCE equipment	281,893	2	1,060 Structures Destroyed / 274 Structures Damaged	Data not available
12/05/2017	CREEK	USFS opined that fire caused by LADWP equipment	15,619	0	123 Structures Destroyed / 81 Structures Damaged	Data not available
12/05/2017	RYE	CAL FIRE opined fire caused by SCE equipment	6,049	0	6 Structures Destroyed / 3 Structures Damaged	Data not available

⁴⁰ Wildfire history data is derived from various sources including SCE incident reports and related communications, CAL FIRE (<https://www.fire.ca.gov/stats-events/>), and U.S Forest Service (<https://nap.nwcg.gov/NAP/>).

⁴¹ Where an Official Cause is stated, the source of the Official Cause was obtained from the identified agency's Fire Investigation Cause and Origin Report.

⁴² In some instances, an agency may provide data related to one component of financial loss such as costs associated with suppression efforts, however, SCE is not aware of an authoritative government source that provides all-inclusive data regarding financial loss.

Ignition Date ⁴⁰	Fire Name ⁴⁰	Official Cause ⁴¹	Fire Size (Acres) ⁴⁰	# of Fatalities ⁴⁰	# of Structures Destroyed and Damaged ⁴⁰	Financial Loss (US\$) ⁴²
11/08/2018	WOOLSEY	CAL FIRE opined fire caused by SCE equipment and unidentified communication line	96,949	3	1,643 Structures Destroyed / 364 Structures Damaged	Data not available
10/10/2019	SADDLE RIDGE	Los Angeles City Fire Dept opined that the cause of the fire is undetermined	8,799	1	24 Structures Destroyed / 91 Structures Damaged	Data not available
09/06/2020	BOBCAT	No official cause. Under investigation	115,997	0	169 Structures Destroyed / 47 Structures Damaged	Data not available
10/26/2020	SILVERADO	No official cause. Under investigation	12,466	0	5 Structures Destroyed / 11 Structures Damaged	Data not available
09/05/2022	FAIRVIEW	No official cause. Under investigation	28,307	2	36 Structures Destroyed / 8 Structures Damaged	Data not available

SCE identifies the following wildfires which meet the definition of “catastrophic” over the past 20 years wherein SCE, CAL FIRE, or another authoritative source opined that the fire was likely ignited by electrical equipment, or the cause of the fire is still under investigation. The information provided below should not be construed as an admission of any wrongdoing or liability by SCE.

- i The **Ranch Fire** ignited on 10/20/2007 wherein the United States Department of Agriculture (USDA) United States Forest Services (USFS) opined that during extreme Santa Ana Wind conditions, a preform attached to a bell-type insulator on a distribution circuit broke, causing the insulator to pull away from the steel tower and suspending it while still attached to the tap line. The winds caused the conductor to swing back and forth allowing the bell insulator to make contact with a section of the tower and ignited the fire.

SCEs' Response to
CalAdvocates-A2308013-35
Question 2

Southern California Edison
A.23-08-013 – Thomas Fire Cost Recovery

DATA REQUEST SET CalAdvocates-SCE-A2308013-35

To: Cal Advocates
Prepared by: Jose Moran
Job Title: Senior Advisor
Received Date: 4/17/2024

Response Date: 5/1/2024

Question 02:

In Data Request CalAdvocates-SCE-A2308013-22, Question 11, Cal Advocates requested that SCE provide a list of wildfires in the period from 1998 through 2017 where either SCE or a fire agency determined that SCE's equipment was likely responsible for igniting the fire. On March 27, 2024, SCE provided a spreadsheet titled "CONFIDENTIAL_SCE_TKM_Historical Fires" that responded to Cal Advocates' request.

Please supplement the spreadsheet SCE provided in response to Cal Advocates DR 22, Question 11 as follows:

- a) Add an additional column with the latitude of the ignition location of each fire listed (as exactly as is known)
- b) Add an additional column with the longitude of the ignition location of each fire listed (as exactly as is known)

Response to Question 02:

CONFIDENTIAL

**The Attachment(s) Are Marked Confidential In Accordance With Applicable Law and Regulation.
Basis for Confidentiality In Accompanying Confidentiality Declaration.
Public Disclosure Restricted.**

Please see the attached Excel spreadsheet that includes the information requested in (a) and (b) where known.

Cal Advocates Analysis
“Distances Between Thomas
and SCE Fires”

Historic_Wildfire_Ignition_D

Fire	Historic_Wildfire_Name	ate	Distance__Miles_	Distance_Rank
Anlauf	Goodenough Fire	4/8/2013	7.574918817213038	1
Anlauf	Happy Camp Fire	12/3/2006	12.258076661005019	2
Anlauf	Ranch Fire	10/20/2007	22.796967987929317	3
Anlauf	Old Fire	6/4/2016	30.789410129860119	4
Anlauf	Malibu Canyon Fire	10/21/2007	32.214642617522607	5
Anlauf	Fort Fire	7/8/2016	34.620769832111954	6
Anlauf	Sayre Fire	11/14/2008	36.905703042371861	7
Anlauf	Rey Fire	8/18/2016	43.632529204771274	8
Anlauf	Mariposa Fire	9/3/2007	64.714568900809638	9
Anlauf	Bravo Fire	5/15/2017	70.409317435930234	10
Anlauf	Bodfish Fire	6/10/2017	86.708007398841403	11
Anlauf	Green Fire	2/9/2002	88.572430333114852	12
Anlauf	Yankee Fire	8/31/1998	91.765230784417440	13
Anlauf	Way Fire	8/18/2014	95.292016931555708	14
Anlauf	Kernville/James Fire	4/29/2007	98.701747122598661	15
Anlauf	Grass Valley Fire	10/22/2007	105.546189174101784	16
Anlauf	Cottonwood Fire	8/27/2009	136.717594939723995	17
Anlauf	Canyon Fire	6/19/2011	160.292802521603164	18
Anlauf	Fish Fire	7/7/2012	190.142992548921626	19
Anlauf	Round Fire	2/6/2015	210.451535081288398	20
Anlauf	Marina Fire	6/24/2016	244.662877041022341	21
Anlauf	Three Slashes Fire	8/28/2011	262.140327801115404	22
Koenigstein	Goodenough Fire	4/8/2013	11.331452945383832	1
Koenigstein	Happy Camp Fire	12/3/2006	16.165263778513300	2
Koenigstein	Ranch Fire	10/20/2007	25.506983418660390	3
Koenigstein	Fort Fire	7/8/2016	34.119211485712263	4
Koenigstein	Old Fire	6/4/2016	34.539424262138567	5
Koenigstein	Malibu Canyon Fire	10/21/2007	35.728407536519924	6
Koenigstein	Rey Fire	8/18/2016	39.814267233559811	7
Koenigstein	Sayre Fire	11/14/2008	40.729855533708182	8
Koenigstein	Mariposa Fire	9/3/2007	61.045180713434036	9
Koenigstein	Bravo Fire	5/15/2017	69.729874974260596	10
Koenigstein	Bodfish Fire	6/10/2017	86.694245425170294	11
Koenigstein	Yankee Fire	8/31/1998	91.792927303491226	12
Koenigstein	Green Fire	2/9/2002	92.481804726495639	13
Koenigstein	Way Fire	8/18/2014	95.148791394380325	14
Koenigstein	Kernville/James Fire	4/29/2007	98.654278472188622	15
Koenigstein	Grass Valley Fire	10/22/2007	109.269127776167522	16
Koenigstein	Cottonwood Fire	8/27/2009	140.623864052195074	17
Koenigstein	Canyon Fire	6/19/2011	158.418686169202175	18
Koenigstein	Fish Fire	7/7/2012	189.516310067868460	19
Koenigstein	Round Fire	2/6/2015	209.406211725976135	20
Koenigstein	Marina Fire	6/24/2016	243.090273252503266	21
Koenigstein	Three Slashes Fire	8/28/2011	266.027508190180129	22

Safety and Enforcement
Division, Report on Southern
California Edison's Company's
Compliance with the Malibu
Area Safety Enhancements
Protocol and Remediation
Requirements in Decision 13-
09-028

**Report on Southern California Edison Company's
Compliance with the Malibu Area Safety Enhancements
Protocol and Remediation Requirements in Decision 13-
09-028**

**Safety and Enforcement Division
California Public Utilities Commission**

December 2022

I. BACKGROUND

On October 21, 2007, three Southern California Edison Company (SCE) poles fell and ignited a fire that burned 3,836 acres. The fire destroyed 14 structures and 36 vehicles and damaged 19 other structures. According to the Los Angeles County Fire Department, the fire resulted in \$14,528,300 estimated dollar loss. There were no injuries or fatalities caused by the incident.

The poles that caused the fire were jointly used by SCE, AT&T, NextG, Sprint and Verizon. The poles supported both electric supply and communication facilities.

II. SED INVESTIGATION

The Safety and Enforcement Division (SED) investigated the incident and found multiple violations of the Commission's safety requirements.

SED found that at least one of the poles was overloaded and did not comply with the General Order 95 (GO95) safety factor requirements and California Public Utilities Code safety standards. SED further found that that replacement poles were installed in the Malibu Canyon without regard for the known local conditions, namely the Santa Ana winds. SED also found that at least one replacement pole that did not meet the safety factor

standard for new construction was installed in the area. Finally, SED found that SCE and the joint occupiers of the poles violated Rule 1.1 of the Commission Rules of Practice and Procedure by providing incomplete and/or misleading accident reports, data responses and testimony.

SED provided its findings to the Commission on October 21, 2008, and the Commission released the SED report on December 18, 2008.

III. OII AND DECISION 13-09-028

On January 29, 2009, the Commission opened an Order Instituting Investigation (OIR) to determine if the pole owners and tenants violated the Commission's safety requirements including the California Public Utilities Code and General Order 95. The respondents in the proceeding were SCE, AT&T, NextG, Sprint and Verizon.

On May 20, 2013, SED and SCE filed a settlement agreement with the Commission. In the settlement agreement, SCE admitted a pole was overloaded and violated GO95. Furthermore, SCE admitted that it violated Rule 1.1 of the Commission's Rules of Practice and Procedure by withholding pertinent information from SCE and the Commission. SCE also agreed to pay a fine of \$20 million and to provide an additional \$17 million to assess pole compliance with GO95 in the Malibu area, referred to as the Malibu Area Safety Enhancements Protocol, and remediate any substandard poles found.

On September 13, 2012, CPUC Decision 12-09-019 approving a settlement agreement (CIP Settlement) with: AT&T, Sprint, and Verizon Wireless (“the Settling Respondents”) regarding their involvement with the Malibu Canyon Fire in October of 2007.

The CIP Settlement required, among other things, that the Settling Respondents upgrade the safety factor for all utility poles along 3.38 miles of Malibu Canyon Road.

Decision 13-09-028, issued on September 19, 2013, approved the settlement agreement reached between SED and SCE. The decision specified conditions that approval of the settlement is subject to. These conditions include:

- SCE must complete a pole assessment per the settlement agreement
- SCE must provide bi-monthly reports to SED on the status of the pole assessment and remedial measures
- SED must prepare a report summarizing the results of the pole assessment
- SCE must verify that the poles in Malibu Canyon meet its internal standard for high wind areas
- SCE may not recover from its ratepayers any costs associated with complying with the decision

IV. SCE COMPLIANCE WITH DECISION 13-09-028

SCE completed its assessments of utility poles pursuant to the Malibu Area Safety Enhancements Protocol. As part of its assessment, it verified that the poles meet specified design criteria based upon calculated loads resulting primarily from wind and the presence of attached facilities. This involved a field assessment as well as a desktop analysis to estimate each pole's safety factor. The field assessment measured and/or validated the pole's attributes as well as the size and type of equipment it supports. The desktop analysis integrates data from the field assessment, design standards, and other data associated with the pole to calculate the pole loading safety factor.

Poles that were not compliant with GO95 safety factors or SCE internal standards were identified and the appropriate remediation was designed and implemented. Depending on the nature and extent of the noncompliant safety factor, the remediation required either repair (the installation or modification of guy wires) or complete replacement of the pole, including removal and reinstallation of all attachments.

In total, 8,728 poles were assessed. 6,505 poles (75%) were found to be compliant and 2,223 poles (25%) were found to be noncompliant with the safety factor standards. The noncompliance was caused by bending (1,978 poles or 89%), guy wire deficiencies (182 poles or 8%) and buckling (63 poles or 3%). The assessments resulted in 182 pole repairs and 2,035 pole replacements.

In June 2022, SCE submitted its final bimonthly report and indicated that a total of \$77,804.25 for work associated with the Malibu Settlement was recorded. This brings the total shareholder spend to \$17 million

V. CONCLUSION

SED has determined that SCE is in compliance with Decision 13-09-028. SED monitored SCE's ongoing compliance by:

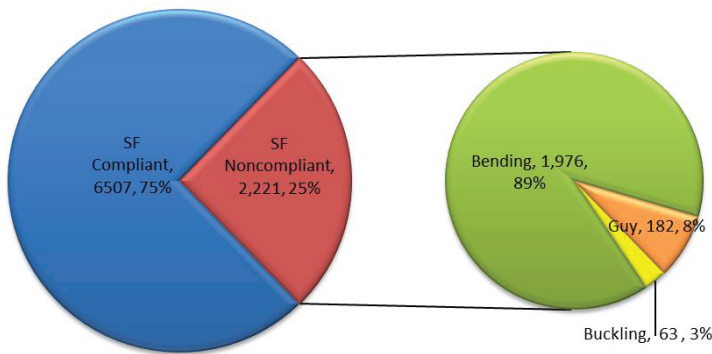
- Reviewing SCE's bi-monthly reports
- Discussing SCE's finding and remedial measures with its staff
- Conducting audits of SCE's facilities
- Meeting with SCE staff

SED did not find any significant issues with SCE's Malibu Area Safety Enhancements Protocol compliance and does not have further recommendations at this time.

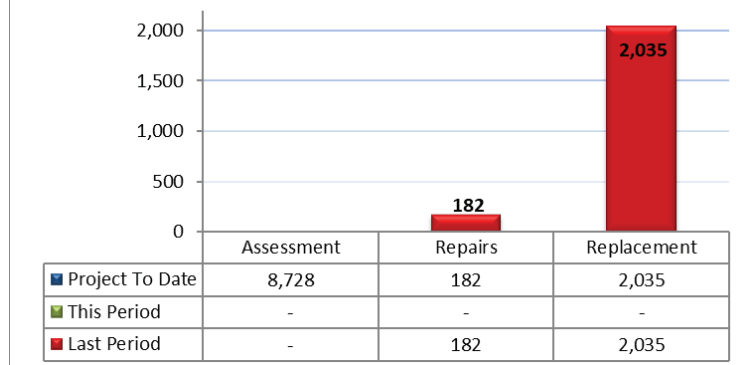
SED Report
April 2022 – June 2022 Report
June, 2022

Malibu Status Report for April 1, 2021 – June 30, 2022

Overall Safety Factor Noncompliance Rate



Completed Poles



*Assessments not graphed due to scale.

Comments

- In June, \$77,804.25 for work associated with the Malibu Settlement was recorded. This brings the total shareholder spend to \$17 million. Accordingly, this will be the last status report.

Project Spending (000s)

Description	This Period	Project To Date	Forecast Project Spend
Assessment	\$0	\$811	\$700
Repair	\$0	\$272	\$500
Replace	\$78	\$15,917	\$15,800
Total	\$78	\$17,000	\$17,000

The Overall Safety Factor Noncompliance Rate chart has been updated to reflect the most recent analysis.

Pole replacement counts are now based on SCE's Pole Tracker database system, which provides a more real time accounting of completed poles.

Glossary of Terms

- **Pole Load Assessment:** General Order (G.O.) 95 requires that utility poles meet specified design criteria based upon calculated loads resulting primarily from wind and the presence of attached facilities. These criteria are called safety factors. The calculation of safety factors is referred to as pole loading. Pole loading assessments require a field assessment as well as a desktop analysis to estimate each pole's safety factor. The field assessment measures or validates the pole's attributes as well as the size and type of equipment it supports. The desktop analysis integrates data from the field assessment, design standards, and other data associated with the pole to calculate the pole loading safety factor.
- **Repairs & Replacements:** Poles that are not compliant with G.O. 95 safety factors or SCE internal standards will be identified and the appropriate remediation will be designed and implemented. Depending on the nature and extent of the noncompliant safety factor, the remediation will require either repair (i.e. the installation or modification of guy wires) or complete replacement of the pole, including removal and reinstallation of all attachments.
- **Safety Factor:** Safety factor is the margin of reserve strength against failure in a structure loaded to its design loads. It is expressed as a ratio of Load or Stress at Failure divided by Load or Strength at Design loading. Safety factors are margins to account for:
 - Any uncertainty in the design loads
 - Any uncertainty in the pole strength
 - The relative importance of the structure
- **Guy Wires:** Guy wires are high strength steel cables that are attached to poles and to a ground anchor in a direction opposite to the angle load to resist that load. In cases of guy wire or wires can't be installed to resist angle loads, then a specially engineered pole will be designed to resist the load and will be engineered and installed so that under normal conditions, the pole will be nearly plumb.
- **Bending Safety Factor & Bending Failure:** In the context of an SCE pole loading calculation report, the bending safety factor is actually an overall safety factor for the pole loaded with all horizontal and vertical loads which occur under the design loading. For an unguyed pole, the stresses under these loads are mostly bending stresses which occur as the cantilevered pole bends with a transverse wind loading the wires. The pole will bend away from the wind load while it's being loaded. A bending failure is a pole loaded such that its calculated safety factor falls below the acceptable safety factor. It hasn't actually failed as in bending until it breaks, but the margin against failure is lower than the required margin.
- **Buckling Safety Factor and Buckling Failure:** The buckling safety factor pertains to the bow and arrow effect that occurs on guyed poles or other circumstances where similar results may occur due to wire configuration. Because poles are long and slender, the loading capacity of the pole when loaded with large vertical loads can be less than the crushing strength of the wood. In terms of an SCE pole loading report, a buckling failure is not a pole loaded to the point of the actual buckling failure but the calculated vertical load is high enough so that the margin against failure is below the required margin.