

Decision 89 09 069 SEP 27 1989

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Rancho Hills Community Association, )  
Lake Shastina Property Owners )  
Association, Lake Shastina )  
Community Services District, Lake )  
Shastina Mutual Water Company, )

Complainants, )

vs. )

Pacific Power & Light Company )  
(CIS No. U 901 E), )

Defendant. )

Case 88-08-017  
(Filed August 9, 1988)

Charles R. Smith, for complainants.  
James C. Paine, Attorney at Law, for defendant.

OPINION

On August 9, 1989, complainants filed the instant complaint because of their dissatisfaction with the quality of electric service provided by defendant in the Lake Shastina subdivision. The complaint also alleges that the actions taken by defendant to correct the alleged unsatisfactory service are inadequate.

In its answer filed September 14, 1988 defendant acknowledges the existence of service problems and their apparent causes. The answer also describes the corrective action that is contemplated.

Public hearing was held before Administrative Law Judge O'Leary at Weed on April 4, 1989. The matter was submitted with the filing of the transcript on May 24, 1989.

The Lake Shastina subdivision is located in Siskiyou County, approximately 11 miles north of Weed.

Evidence presented by complainants discloses that during the period January 1985 to March 1989, inclusive, many electric service outages (outages) occurred in the service area involved in this proceeding as set forth in Table 1.

TABLE 1

OUTAGES PER MONTH

Month	Year				
	1985	1986	1987	1988	1989
January	13	15	3	6	1
February	5	9	1	3	1
March	8	8	7	11	1
April	3	8	12	2	
May	3	10	5	5	
June	15	9	7	22	
July	10	5	15	11	
August	9	15	9	6	
September	18	11	10	13	
October	14	10	11	3	
November	14	7	7	2	
December	<u>1</u>	<u>4</u>	<u>10</u>	<u>4</u>	<u>    </u>
YEARLY TOTALS	113	111	97	88	3*

\* 1st three months only.

Complainants request that defendant furnish them with a master plan detailing the specifications and construction standards so that the effectiveness of the corrective action can be determined over the next 20 years.

In the complaint, complainants seek the following remedies in the event the outage problem is not corrected that defendants rates be adjusted downward as follows:

- "a. Decrease power rate if master plan is not submitted within thirty days of P.U.C. Ruling.
- "b. Decrease adjusted rate by another 50% if current fault rate is not decreased 50% in 6 months from date of P.U.C. Ruling.
- "c. Decrease adjusted rate by another 50% if current fault rate is not decreased 75% in 12 months from date of P.U.C. Ruling.
- "d. Decrease adjusted rate by another 50% if current fault rate is not decreased 90% in 18 months from date of P.U.C. Ruling."

Although defendant's records differ slightly from the data set forth in Table 1, defendant does not dispute the evidence of complainants concerning the number of outages that have occurred during the period set forth in Table 1.

Evidence presented by defendant discloses that underground distribution cable for the Lake Shastina subdivision was installed between 1971 and 1977. The type of cable installed was essentially the first type used for underground installation. It was referred to in the industry as URD cable which stands for underground residential distribution. Approximately 450,000 feet of URD cable was installed at Lake Shastina. The cable for the most part was installed without conduit. The cable was coated with a high molecular weight polyethylene insulation. In 1979 defendant commenced experiencing an abnormal number of outages in the Lake Shastina area. It was determined that the outages were being caused by a phenomenon known as "treeing." Treeing causes voids in the cable insulation. When the voids reach the outer edge of the insulation, there is not enough insulation left for the voltage and it causes flashover and a destructive failure within the cable

itself. As the outages increased over the years the defendant became very concerned as to the underlying cause of the treeing phenomenon. In 1983 General Electric Company published an article which indicated lightning could be a cause. As a result of that article defendant installed a new type of lightning surge arrester in the Lake Shastina area. The installation of the lightning surge arrestors did not eliminate the problem. It was finally determined that to correct the problem all cable that was installed in the Lake Shastina subdivision between 1971 and 1977 should be replaced. Commencing in 1985 defendant started a capital improvement program to replace the entire 450,000 feet of URD cable that had been installed between 1971 and 1977. Table 2 sets forth the budgeted and actual amounts spent for this program for the period 1985 to 1987, inclusive.

TABLE 2

<u>Year</u>	<u>Budgeted Amount</u>	<u>Expended Amount</u>
1985	\$250,000	\$241,000
1986	500,000	614,000
1987	500,000	836,000

An abnormal number of outages still occurred in mid-1988. Authorization was received from defendant's management to accelerate the cable replacement. As a result of that authorization a total of \$2,392,000 was expended, most of which was expended during September and October 1988. ✓

#### Discussion

It can readily be seen from Table 1 that there was a substantial decrease in the number of outages commencing with October 1988. It appears that the replacement of the cable has rectified the outage problem. Since the problem complained of has been corrected we do not believe it appropriate to impose sanctions

on defendant. Should the outage problem reoccur, complainants can file another complaint. With respect to complainants' request that defendant be required to furnish a master plan detailing the specifications and construction standards, we do not believe it necessary that such be supplied. General Order 128 sets forth the rules for construction of underground electric supply and communication systems. Should complainant have reason to believe defendant is not complying with the general order, it is free to raise the issue in another formal complaint.

Findings of Fact

1. Many outages occurred in the Lake Shastina area as set forth in Table 1.
2. The original distribution cable for the Lake Shastina area was installed between 1971 and 1977.
3. The outages were caused by a phenomenon known as "treeing."
4. The cable that was installed between 1971 and 1977 has for the most part been replaced.
5. Since October 1, 1988 the incidents of outages have been substantially reduced.

Conclusions of Law

1. The problem complained of has been rectified.
2. The relief sought by complainants should be denied.

O R D E R

IT IS ORDERED that the relief requested in the complaint is denied.

This order becomes effective 30 days from today.

Dated September 27, 1989, at San Francisco, California.

G. MITCHELL WILK  
President  
STANLEY W. HULETT  
JOHN B. OHANIAN  
PATRICIA M. ECKERT  
Commissioners

Commissioner Frederick R. Duda,  
being necessarily absent, did  
not participate.

I CERTIFY THAT THIS DECISION  
WAS APPROVED BY THE ABOVE  
COMMISSIONERS TODAY.

*Wesley Franklin*

- 6 WESLEY FRANKLIN, Acting Executive Director

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