

Decision 99-10-024 October 7, 1999

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of PACIFIC GAS AND
ELECTRIC COMPANY for Authority Among
Other Things, to Decrease its Rates and
Charges for Electric and Gas Service, and
Increase Rates and Charges for Pipe
Expansion Service.

(Expansion and Gas) (U 39 M)

Application 94-12-005
(Filed December 9, 1994)

Commission Order Instituting Investigation
into the rates, charges, service, and practices of
Pacific Gas and Electric Company.

Investigation 95-02-015
(Filed February 22, 1995)

**INTERIM OPINION ON PETITION
FOR MODIFICATION REGARDING POLE LOADING**

On July 12, 1999, Pacific Gas and Electric Company (PG&E) filed a Petition for Modification of Decision (D.) 99-06-080. In that petition, PG&E asks that the Commission allow it to maintain "Note 7" and clarify that the interim wood pole loading minimum safety factor of 2.67 applies to it as a result of D.99-06-080, the Storm Damage Decision. In this decision, we deny PG&E's petition regarding Note 7 and clarify that the General Order (GO) 95, Rule 44.2 wood pole loading minimum safety factor, as interpreted in D.98-10-058 applies to PG&E as well as other wood pole users.

Background

The Storm Damage Decision addressed PG&E's response to the severe wind and rainstorms of December 1995. In that decision we directed PG&E to pay \$85,000 in fines, record all storm-related damage claims below the line,

change its claims procedure, modify the wording on its monthly bills regarding how to file a claim, and provide certain reports to our staff. We also adopted some of the agreements, submitted in the form of joint testimony, reached among the Office of Ratepayer Advocates (ORA), the Consumer Services Division's Utility Safety Branch (USB), and PG&E.

Most relevant to PG&E's petition was our discussion of GO 95, our Rule for Overhead Electric Line Construction. We stated that we will open a rulemaking to determine the appropriate wood pole minimum safety factor for Grades "A," "B," "C," and "F" and the appropriate relationship between the safety factor and subsequent additions to existing wood poles. Specifically, the Commission stated that we will consider revision of Rule 44.1, *Installation and Reconstruction*, Table 4, Wood Poles and Rule 44.2, *Replacement* within GO 95, Section IV Strength Requirements of All Classes of Lines. Until completion of that rulemaking, we stated that the interim wood pole loading minimum safety factor that we adopted in D.98-10-058 – 2.67 – would continue to apply.¹ Finally, we directed PG&E to cancel Note 7 of Construction Drawing 015203 to avoid any future confusion on interpretation of GO 95, Rule 44.2.²

From the record underlying D.99-06-080, we know that Note 7 instructs PG&E employees responsible for determining whether an existing Grade A or B wood pole has adequate strength for additional conductor or equipment attachments.³ As part of the PG&E, USB, and ORA joint testimony, it was

¹ See D.98-10-058, mimeo., pp. 72-75.

² On September 2, 1999, we adopted D.99-09-035 wherein we stayed the direction to PG&E to cancel Note 7 of Construction Drawing 015203.

³ The terms "loads," "attachments," and "underbuilds" are used interchangeably by the parties and in D.99-06-080. They refer to additional equipment attached to poles by either the utility that owns the pole or by other utilities through joint pole use

recommended that the Commission cancel Note 7, and adopt a more stringent interpretation of the strength requirements rule that would require a safety factor of 4.0. In the joint testimony, the three parties also recommended that the Commission open a rulemaking to review GO 95. The proposed decision recommended the Commission cancel Note 7, interpret GO 95 to apply the 4.0 safety factor, and rejected the recommendation to review GO 95 in a rulemaking.

In comments on the proposed decision, PG&E argued that it only agreed to the more stringent interpretation of GO 95 and cancellation of Note 7 in the context of also getting a review of GO 95 in a rulemaking. PG&E argued that applying the 4.0 factor to it and not others that may attach equipment to the same poles would destroy the consistency among all utilities and other pole users endorsed and confirmed when the Commission adopted the 2.67 interim safety factor. In reply comments, ORA supported the adoption of the 4.0 safety factor and stated that since PG&E was the only electric utility in California using an internal design guideline like Note 7, cancellation of it would place PG&E on equal footing with similarly situated electric utilities.

The Petition

Ultimately, as noted above, the Commission adopted the recommendation to cancel Note 7, and stated that it would continue to apply the 2.67 interim safety factor. It is this action which prompted PG&E to file its petition. PG&E

agreements. This subject is addressed in D.99-06-080 in the section titled Underbuilds, pages 27-36 (mimeo.).

claims the Storm Damage decision is internally inconsistent on what safety factor should apply to PG&E pending the outcome of the pole loading rulemaking. It points to language that requires the cancellation of Note 7 (e.g. Ordering Paragraph 11, Conclusion of Law 13) and language that states that the interim safety factor adopted in D.98-10-058 continues to apply (e.g. Conclusion of Law 13, discussion on p. 35) as the source of the inconsistency. PG&E requests that we clarify the decision by eliminating the requirement that PG&E cancel Note 7 and allow the interim safety factor to remain in effect until the rulemaking concludes. It argues that the interim safety factor has been in place since December 1998, has the broad support of pole users, is uniformly applied, and that there is no evidence to support applying a different safety factor to PG&E.

ORA filed a response, recommending the Commission deny the petition. ORA argues that D.99-06-080 clearly directs PG&E to eliminate its interpretation of GO 95 that allows the loading of wood utility poles to their replacement or rehabilitation value without providing an allowance for deterioration – Note 7 of Construction Drawing 015203. It argues that PG&E is seeking to avoid the expense of maintaining a safe and reliable electric system and the Commission's authority to order PG&E to cease unsafe loading practices. It asks the Commission to sanction PG&E for PG&E's failure to comply with ordering paragraph 11.⁴ ORA argues that PG&E is the only utility in California that interprets GO 95 to allow for the reduction of the safety factor for wood poles to 2.67 by means of additional loadings with no allowance for deterioration. It cites D.98-10-058 for the proposition that the Commission expected utilities to perform engineering analysis that takes deterioration into account when new or changed

⁴ ORA sets forth its reasons for recommending a sanction in its response to PG&E's motion for stay of ordering paragraph 11. We will address whether a sanction is appropriate in our decision on the motion for stay.

attachments to poles were being considered. In addition, ORA asks the Commission to institute a rulemaking to address safety factor issues for all pole owners and owners of all supporting structures in California to consider adopting standards set forth in the National Electrical Safety Code.

Discussion

In D.99-06-080, it was our intention to continue to apply the uniform minimum wood pole loading safety factor contained in GO 95, interpreted in the manner described in D.98-10-058, that is, replacement or reinforcement of a wood pole is required when the safety factor drops to 2.67. In that decision, we recounted the testimony USB gave in this proceeding, Exhibit 511, p. 32:

"USB believes that due to pole deterioration, G.O. 95 allows the minimum safety factor to be reduced. Section 44.2 modifies the minimum safety factor by reducing it (for Grade A and B construction) to not less than 2/3. As stated in this section, a reduction is allowed for 'deterioration or changes in construction arrangement or other condition subsequent to installation.' As an example, a safety factor of 4 can be reduced to 2.67 as allowed by Section 44.2."

(D.98-10-058, mimeo., p. 74, and Conclusion of Law 49.) We adopted 2.67 as the minimum safety factor. We did so understanding that engineering analysis may be necessary to determine whether poles have adequate space and strength to accommodate a new or reconstructed attachment. (Id., mimeo., p. 116, Findings of Fact 23, 26.) We agree with ORA that such an analysis should take deterioration of the pole into account. Reading Rule 44.2 as allowing a reduction in safety factor to not less than two-thirds of the appropriate safety factor solely as the result of construction arrangement ignores other conditions plainly recognized in Rule 44.2, namely deterioration.

Many of our orders in D.99-06-080 directed further study of the potential wood pole overloading problem on PG&E's system, but we also stated our concern that wood poles, generally, may be being built out to the 2.67 safety

factor, leaving no safety cushion for natural deterioration.⁵ A Grade A wood pole may be installed and meet or exceed the 4.0 safety factor. Attachments may be made shortly thereafter without dropping below the 2.67 minimum safety factor, for example. However, given utility pole inspection and maintenance schedules, that pole may not be inspected for upwards of twenty years. Conditions in the intervening years may have caused deterioration of the pole, lowering the safety factor to below the minimum. Attachments early in the inspection and maintenance cycle of a pole increase the likelihood that the safety factor will reach replacement levels undetected. Building out a pole to the 2.67 safety factor may leave no safety cushion for upwards of twenty years. At present, the utility must make a judgement as to whether an attachment will likely result in a drop in the safety factor to the minimum, given deterioration, before the next scheduled inspection.

In comments, PG&E argues that its Note 7 requires that both load and deterioration be considered in the safety factor calculation, and is therefore consistent with the draft decision's interpretation of GO 95. We disagree. PG&E's Note 7 does not provide for any judgement as to whether an attachment will likely result in a drop in the safety factor to or below the minimum given deterioration before the next scheduled inspection. PG&E's Note 7 does not account for the troubling scenario described above, where attachments occur early in the inspection and maintenance cycle of a pole, leaving a pole's safety factor at replacement or reinforcement levels undetected for upwards of twenty years.

⁵ We specifically noted that the Comments of the California Coalition and the Comments of GTE California, Inc., make it clear that they believe the safety factor may be degraded to 2.67 merely by additional attachments, regardless of the age of the pole.

Pursuant to GO 95, Rule 44.2, the safety factor may drop because of deterioration, changes in construction arrangement, and other conditions subsequent to installation. We emphasize that, at a minimum, the safety factor must not drop below 2.67, and if it does, then GO 95 requires replacement or reinforcement. We will modify D.99-06-080 to make it clear that loading a pole until it reduces the safety factor to not less than two-thirds of the appropriate safety factor without taking deterioration of the pole into account is not in compliance with Rule 44.2 of GO 95. In the rulemaking we intend to open to consider revision of the wood pole minimum safety factor, we will explore whether it is appropriate to separately account in the GO for reductions in the safety factor due to deterioration and due to construction arrangement.

Our requirement in D.99-06-080 that PG&E cancel Note 7 was intended to eliminate an internal design guideline used by PG&E but no other utility. According to ORA, Note 7 allows for the reduction of the safety factor for wood poles to 2.67 without allowance for future deterioration (ORA's "safety cushion"). We directed its cancellation "to avoid any future confusion." PG&E's claim that cancellation of it would leave the 2.67 minimum in place for all utilities and pole users except PG&E is unfounded. What governs is the Commission's decision and GO, not an internal design guideline.⁶ D.99-06-080 continues to apply the interpretation of GO 95, Rule 44.2, adopted in D.98-10-058 for all utilities and pole users. Specifically, the minimum safety factor for Grade A and B construction may be reduced to not less than two-thirds of the appropriate safety factor in allowance for deterioration, changes in construction

⁶ PG&E does not make it clear in its petition why it believes its internal design guideline, and not the GO and decisions interpreting it, would govern. PG&E does not explain why it believes that cancellation of an internal design guideline that is *consistent* with the GO would result in a different minimum safety factor applying to it relative to other utilities and pole users.

arrangement, and other conditions subsequent to installation. Thereby, a safety factor of 4 may be reduced to not less than 2.67. We deny PG&E's request that we allow it to maintain Note 7.

Finally, we address ORA's request that we open a rulemaking to consider adoption of the National Electrical Safety Code for strength and loading requirements associated with wood utility poles. As recounted above, we stated in D.99-06-080 that we will open a rulemaking to consider the issue of revision of wood pole minimum safety factors and their replacement or reinforcement. Once that rulemaking is open, ORA or any party may refer us to The National Electrical Safety Code requirements in filed comments. ORA's request is denied.

Comments on Draft Decision

The draft decision of the administrative law judge in this matter was mailed to the parties in accordance with Pub. Util. Code § 311(g) and Rule 77.1 of the Rules of Practice and Procedure. Comments were filed on September 27, 1999, and reply comments were filed on October 4, 1999. Comments were filed by PG&E and ORA. Both parties support adoption of the draft decision, and recommend changes to its wording but not its result. These comments were taken into consideration and the draft decision was revised.

Specifically, we changed the decision to reflect the fact that a pole may not be inspected for deterioration for upwards of twenty, rather than five, years. Also, we remove the discussion and related direction to USB to review Chapter 3, Specifications, of the Joint Pole Manual. PG&E states that since submission of this proceeding, the Manual has been replaced; that its document successor does not address minimum requirements for wood pole loading. We also respond to PG&E's comments on its Note 7.

Findings of Fact

1. In D.99-06-080, we intended to continue to apply the uniform minimum wood pole loading safety factor contained in GO 95, interpreted in the manner described in D.98-10-058.

2. In D.98-10-058, we adopted 2.67 as the minimum safety factor for Grade A and B wood poles, pursuant to GO 95, Rule 44.2. We did so understanding that engineering analysis may be necessary to determine whether poles have adequate space and strength to accommodate a new or reconstructed attachment.

3. Reading Rule 44.2 of GO 95 as allowing a reduction in safety factor to not less than two-thirds of the appropriate safety factor solely as the result of attachments ignores other conditions plainly recognized in Rule 44.2, namely deterioration, and would be inconsistent with D.98-10-058.

Conclusions of Law

1. We should modify D.99-06-080 to make it clear that loading a pole until it reduces the safety factor to not less than two-thirds of the appropriate safety factor without taking deterioration of the pole into account is not in compliance with Rule 44.2 of GO 95.

2. PG&E's petition to modify D.99-06-080 to allow it to maintain Note 7 should be denied.

3. ORA's request that we open a rulemaking should be denied.

4. This proceeding should remain open for the purpose of addressing pending applications for rehearing.

O R D E R

IT IS ORDERED that:

1. Decision (D.) 99-06-080 is modified at page 35. The first sentence in the first full paragraph on that page should be followed by this sentence:

We would regard such an underbuild not in compliance with General Order (GO) 95, Rule 44.2, for it would ignore one of the conditions wherein reduction of the safety factor prior to replacement or reinforcement may occur, namely, deterioration.

2. Pacific Gas and Electric Company's petition to modify D.99-06-080 to allow it to maintain Note 7 is denied.

3. Office of Ratepayer Advocates' request that we open a rulemaking is denied.

4. This proceeding remains open for the purpose of addressing pending applications for rehearing.

This order is effective today.

Dated October 7, 1999, at Los Angeles, California.

RICHARD A. BILAS
President
HENRY M. DUQUE
JOSIAH L. NEEPER
JOEL Z. HYATT
CARL W. WOOD
Commissioners