

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



April 14, 2011

CA2011-003

Mr. Steven W. Stone  
Outside Plant Engineering Manager  
Volcano Communications Group  
20000 Highway 88  
P.O. Box 1070  
Pine Grove, CA 95665

Subject: Volcano Communications Group Electric Audit

Dear Mr. Stone:

On behalf of the Utilities Safety and Reliability Branch of the California Public Utilities Commission, Ryan Yamamoto, Alok Kumar and I conducted a March 7-9, 2011 audit of Volcano Communications Group's (Volcano's) General Order 95 and 128 compliance program. The audit included a review of Volcano's maintenance records and inspections of Volcano's outside plant facilities.

During our audit, we identified violations of one or more General Orders. I have enclosed an audit summary itemizing those violations. By May 16, 2011, Volcano must send me a written response detailing, with estimated completion dates, its plans to address each of the violations listed in the audit summary. Volcano may email an electronic copy of the response to [kh2@cpuc.ca.gov](mailto:kh2@cpuc.ca.gov), or send a printed copy to:

Attn: Kenneth How  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102-3298

Should you have any questions concerning this letter, I can be reached at by phone at (415) 703-2875 or by email at [kh2@cpuc.ca.gov](mailto:kh2@cpuc.ca.gov).

Sincerely,

A handwritten signature in blue ink that reads "Kenneth How".

Kenneth How  
Utilities Engineer  
Utilities Safety and Reliability Branch  
Consumer Protection and Safety Division  
California Public Utilities Commission

Enclosures: CPUC Audit Summary; General Order 95 Rule 18

CC: Raymond Fugere, Program and Project Supervisor, CPUC  
Alok Kumar, Senior Utilities Engineer (Supervisor), CPUC

Ryan Yamamoto, Utilities Engineer, CPUC  
John Lundgren, Director of Network Services, Volcano

# AUDIT SUMMARY

## I. Programmatic Violations

This section discusses the General Order (GO) violations that we found while reviewing Volcano Communications Group's (Volcano's) inspection and maintenance procedures.

### **A. No Auditable Written Inspection or Maintenance Procedures**

GO 95 Rule 18 A: Reporting and Resolution of Safety Hazards Discovered by Utilities states in part:

*“All companies shall establish an auditable maintenance program for their facilities and lines”*

During our audit, we found that Volcano was inspecting its facilities, but had no written procedures detailing how it carried out those inspections. In order to have an auditable inspection and maintenance program, Volcano must have written procedures outlining how it expects its staff to conduct inspections and how it addresses the violations and safety hazards that they find during those inspections.

Volcano's written procedures should additionally address the specific operational deficiencies we found during our audit, summarized below:

#### 1) Undefined Frequency and Scope of Inspections

GO 95 Rule 31.2: Inspection of Lines States in Part:

*Lines shall be inspected frequently and thoroughly for the purpose of insuring that they are in good condition so as to conform with these rules. Lines temporarily out of service shall be inspected and maintained in such condition as not to create a hazard.*

And GO 128 Rule 17.2: Inspection of Lines States in Part:

*Systems shall be inspected by the operator frequently and thoroughly for the purpose of insuring that they are in good condition and in conformance with all applicable requirements of these rules. (See Rule 12.3)*

During the audit, Volcano indicated that it inspects its facilities during its day-to-day business. When showing us its computerized recordkeeping system, Volcano demonstrated how it could use the system to ensure that all facilities were inspected on regular intervals.

While Volcano's recordkeeping system is conducive to the “frequent and thorough” inspection process required by GO 95 Rule 31.2 and GO 128 Rule 17.2, Volcano lacks written procedures

detailing how often it plans to carry out inspections. Volcano also does not have written procedures defining what it expects its inspectors to look for while performing inspections. Volcano must define its inspection intervals and establish the scope of its inspections in order for its inspections to be “frequent and thorough” per GO 95 Rule 31.2 and GO 128 Rule 17.2.

2) Insufficient Documentation of Safety Hazard Notifications to and from Other Parties

GO 95 Rule 18 B: Notification of Safety Hazards states in part:

*If a company, while inspecting its facilities, discovers a safety hazard on or near a communications facility, electric transmission or distribution facility involving another company, the inspecting company shall notify the other company and/or facility owner of such safety hazard no later than 10 business days after the discovery... The notification shall be in writing and must be preserved by all parties for at least five years*

Volcano inspection sheets indicate that its inspectors note the safety hazards they find on facilities belonging to other companies. Volcano, however, does not always notify the other companies of the hazards in writing. Instead, Volcano often notifies the other party only through telephone conversations. Volcano must keep written records of the notifications that it sends out to other parties in order to be in compliance with GO 95 Rule 18.

Conversely, Volcano must also keep records of safety hazard notifications sent to them by other parties for a period of at least five years in order to be in compliance with GO 95 Rule 18.

3) No Prioritization of Violations and Safety Hazards

GO 95 Rule 18 A outlines a prioritization scheme that communication providers are required to apply to their corrective maintenance work. At the time of our audit, Volcano did not assign prioritizations to their corrective work. Volcano staff indicated that all work was generally completed within 30 days, but this was not a formally documented timeframe. Volcano must indicate, in their procedures, how they will prioritize corrective work and assign completion timeframes to work orders.

4) Insufficient Documentation of Violations and Corrective Action

GO 95 Rule 18A: Reporting and Resolution of Safety Hazards Discovered by Utilities states in part:

*Upon completion of the corrective action, the company records shall show the nature of the work, the date and identity of persons performing the work. Prior to the work being completed, the company shall document the current status of the safety hazard, including whether the safety hazard is located in an Extreme and*

*Very High Fire Threat Zone in Southern California, and shall include a scheduled date of corrective action.*

During our audit, Volcano indicated that minor violations identified in the field that are corrected on the spot are not documented. In order to be compliant with GO 95 Rule 18A, Volcano must record these violations and the subsequent actions its staff took to correct them.

## II. Field Violations

During the field portion of the audit, we performed a drive through patrol of Volcano's overhead trunk lines and visited locations where Volcano expected its staff to have recently performed visual inspections. This section lists the GO 95 and 128 violations identified during that portion of the audit.

### A. Violations Found While Verifying Recent Inspections

This subsection lists violations found on recently inspected facilities.

<b>1.</b>	<b>Location:</b>	4036 Zumi Ct, Ione, CA
	<b>Previous Volcano Visit Details:</b>	Work Order # V02-10-00559 Aerial Service Installation "Service Ready" Date 6/30/10
	<b>Date of CPUC Inspection:</b>	3/8/11
<b>Explanation of Violation(s):</b>		
<p><u>Insufficient Radial Clearance Between Volcano Drop and Phone Drop</u></p> <p>GO 95 Table 2 Case 16C requires a 3 inch radial clearance between communication service drops on different circuits.</p> <p>A Volcano cable television drop was touching an AT&amp;T phone drop at this location.</p>		

2.	<b>Location:</b>	445 Preston Ave, Ione, CA
	<b>Previous Volcano Visit Details:</b>	Work Order # V02-10-00753 Aerial Service Installation "Service Ready" Date 8/31/10
	<b>Date of CPUC Inspection:</b>	3/8/11
<b>Explanation of Violation(s):</b>		
<p data-bbox="250 604 537 636"><u>Exposed Ground Wire</u></p> <p data-bbox="250 678 383 709">Rule 84.6:</p> <p data-bbox="331 751 1328 898"><i>Ground wires, other than lightning protection wires not attached to equipment or ground wires on grounded structures, shall be covered by metal pipe or suitable covering of wood or metal, or of plastic conduit material as specified in Rule 22.8–A</i></p> <p data-bbox="250 940 1398 1045">A ground wire was exposed at this location and had no protective covering. The ground wire was also not connected to a piece of Volcano in-line active equipment, a violation of Volcano's standard practice.</p>		

## B. Other Field Violations

This subsection lists violations we found at sites that were not linked to recent inspections.

<b>1.</b>	<b>Location:</b>	449 Stacil, Ione, CA
	<b>Previous Volcano Visit Details:</b>	Aerial Service Installation Jan 2000
	<b>Date of CPUC Inspection:</b>	3/8/11
<b>Explanation of Violation(s):</b>		
<p><u>Insufficient Vertical Clearance between Volcano and AT&amp;T Conductors</u></p> <p>GO 95 Table 2 Case 8C requires a 12 inch radial clearance between communication conductors.</p> <p>The Volcano pole-to-pole span at this location had insufficient clearance from the AT&amp;T span under it.</p>		

<b>2.</b>	<b>Location:</b>	4620 Roadrunner Dr, Ione, CA
	<b>Previous Volcano Visit Details:</b>	Unknown, Service Activated 8/3/10
	<b>Date of CPUC Inspection:</b>	3/8/11
<b>Explanation of Violation(s):</b>		
<p><u>Insufficient Vertical Clearance Between Service and Ground</u></p> <p>Table 1 Case 5B requires a 10 ft vertical clearance for service drops above ground in areas accessible to pedestrians only.</p> <p>At this location, a Volcano service drop was laying on the ground. Volcano had no record of problems at the location. Volcano also did not have a record of its installation date.</p>		



3.	<b>Location:</b>	4648 Roadrunner Dr, Ione, CA
	<b>Previous Volcano Visit Details:</b>	Equipment Change Out 2/29/08
	<b>Date of CPUC Inspection:</b>	3/8/11
<b>Explanation of Violation(s):</b>		
<p><u>Slack Anchor Guy</u></p> <p>GO 95 Rule 86.2:</p> <p><i>Guys shall be attached to structures as nearly as practicable at the center of load. They shall be maintained taut and of such strength as to meet the safety factors of Rule 44.</i></p> <p>There was a slack anchor guy attached to the pole at Volcano conductor level at this location.</p>		
<p><u>Anchor Guy missing Sectionalizing Insulator</u></p> <p>GO 95 Rule 86.6:</p> <p><i>Every overhead or anchor guy, any portion of which is in proximity to a wood pole and supply conductors of 0 - 35,500 volts (see Appendix G, Figures 45 , 48 and 49 ) shall be sectionalized by means of insulators as specified in Rule 86.7–A2 or Rule 86.7–B , and no portion in proximity to such supply conductors shall be grounded.</i></p> <p>The anchor guy attached to the pole at Volcano conductor level at this location was missing a sectionalizing insulator.</p>		
<p><u>Insufficient Clearances between Volcano and AT&amp;T Service Drops</u></p> <p>GO 95 Table 2 Case 16C requires a 3 inch radial clearance between communication service drops on different circuits.</p> <p>Two AT&amp;T service drops were wrapped around a Volcano service drop at this location.</p>		

4.	<b>Location:</b>	1433 Marlette, Ione, CA
	<b>Previous Volcano Visit Details:</b>	Service drop repair due to tree damage 9/11/08
	<b>Date of CPUC Inspection:</b>	3/8/11
<b>Explanation of Violation(s):</b>		
<p data-bbox="250 627 748 659"><u>Insufficient Vertical Clearance at Curb</u></p> <p data-bbox="250 701 516 732">GO 95 Rule 84.8C1:</p> <p data-bbox="329 774 1276 915"><i>Above Public Thoroughfares: Vertical clearance shall not be less than 18 feet. Exception: Not more than 12 feet horizontally from the curb line, the 18 foot clearance may be gradually reduced to not less than 16 feet at the curb line</i></p> <p data-bbox="250 957 1360 1031">At this location, a Volcano service drop was less than 16 ft from the ground at the curb (approximately 13 ft).</p>		