

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



February 8, 2012

EA2011-028

Jason Grace
Engineering Supervisor, Electric Services
Merced Irrigation District
P.O. Box 2288
Merced, CA 95344-0288

Subject: Merced Irrigation District Electric Audit

Dear Mr. Grace:

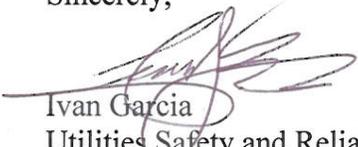
On behalf of the Utilities Safety and Reliability Branch (USRB) of the California Public Utilities Commission (CPUC), Ryan Yamamoto and I conducted an audit of the Merced Irrigation District (MeID) electric distribution system from October 19-21, 2011. The audit included a review of MeID records for November 2007 through October 2011.

During the audit, we identified violations of one or more General Orders. I have enclosed a copy of our audit summary itemizing those violations. By March 9, 2012, MeID must send me a response to this letter detailing its plans to address those violations and when MeID expects to complete them. You may email an electronic copy of the response to iag@cpuc.ca.gov or send a hard copy to:

Attn: Ivan Garcia
California Public Utilities Commission
180 Promenade Circle Suite 115
Sacramento, CA 95834-2939

Should you have any questions concerning this letter I can be reached at by phone at (916) 928-5875 or by email at iag@cpuc.ca.gov.

Sincerely,



Ivan Garcia
Utilities Safety and Reliability Branch
Consumer Protection and Safety Division
California Public Utilities Commission

Enclosures: Audit Summary

CC: Ryan Yamamoto, Utilities Engineer, USRB, CPUC
Alok Kumar, Senior Utilities Engineer, USRB, CPUC
Raymond Fugere, Program and Project Supervisor, USRB, CPUC

AUDIT SUMMARY

I. Record Violations

This section summarizes the General Order (GO) violations that we found during our review of MeID's maintenance records.

A. General Order 165

1. Unable To Determine Inspection Cycles

GO 165 Section IV, specifies in part,

"Each utility subject to this General Order shall conduct inspections of its distribution facilities, as necessary, to assure reliable, high-quality, and safe operation, but in no case may the period between inspections (measured in years) exceed the time specified in the attached table."

MeID did not write down the dates for any detailed inspections of its facilities completed prior to 2011. MeID began to write down dates of detailed inspections of its facilities in early 2011. USRB was unable to determine MeID's inspection cycles for any detailed inspections completed prior to 2011. MeID must perform and document detailed inspections on all of its facilities as required by the GO 165 Inspection Cycle Table.

2. No Diagnostic Equipment Tests

GO 165 Section III: Definitions states in part:

"Detailed" inspection shall be defined as one where individual pieces of equipment and structures are carefully examined, visually and through use of routine diagnostic test, as appropriate, and (if practical and if useful information can be so gathered) opened, and the condition of each rated and recorded.

GO 165 specifies the frequency a utility must inspect its facilities. During our audit, we found that MeID was not performing diagnostic testing on its capacitors and switching/protective devices. MeID must diagnostically test GO 165 listed equipment within the interval specified in GO 165.

B. General Order 95 and General Order 128

1. Late Corrective Actions

General Order 95, Rule 31.1 Design, Construction and Maintenance [of over head lines] and General Order 128 Rule 17.1 Design, Construction and Maintenance [of underground systems] state in part:

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good

MeID's Operations Manual outlines MeID's methodology for prioritizing (with end dates) corrective actions for issues it finds on its electric system. USBR interprets "accepted good practice" in part to mean following all established internal company procedures and standards. Thus, past due corrective actions that violate MeID's Operations Manual also violates General Orders 95 and/or 128.

457 Outstanding Maintenance Tags were not corrected in accordance to MeID's Operations Manual. 34 Outstanding Maintenance Tags were completed late per MeID's Operations Manual.

II. Field Violations

This section lists the GO 95 and 128 violations that we identified during our field inspections of MeID's facilities. For the field work, we primarily chose locations that MeID visited recent to our audit date.

A.	Location:	All Underground Distribution Equipment
	Equipment ID:	All Underground Distribution Equipment
	Previous Visit by Utility:	N/A
	Date Visited by CPUC:	10/20/11
Explanation of Violation(s):		
<p><u>Temperature gun is not being used in underground distribution inspections for elbows</u></p> <p>GO 128 Rule 17.1:</p> <p style="text-align: center;"><i>For all particulars not specified in these rules, designed, constructed, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of [the] communication or supply lines and equipment.</i></p> <p>MeID has accepted that the use of a temperature gun is a good practice to detect temperature changes in elbows. However, the temperature gun is not currently being used for MeID underground distribution inspections.</p>		

B.	Location:	Pole, Dwight St. South of Highway 99, Merced
	Equipment ID:	P-1444
	Previous Visit by Utility:	10/7/11
	Date Visited by CPUC:	10/21/11
Explanation of Violation(s):		
<p><u>High Voltage Signs Missing</u></p> <p>GO 95 Rule 51.6 A3:</p> <p><i>Crossarms where present may be marked in lieu of marking the pole. Such signs shall be placed on the face and back of each crossarm supporting line conductors</i></p> <p>The pole at this location was missing high voltage signs.</p>		

C.	Location:	Padmount, Autry Lane and Sundance St., Merced
	Equipment ID:	J-104
	Previous Visit by Utility:	10/6/11
	Date Visited by CPUC:	10/21/11
Explanation of Violation(s):		
<p><u>Missing MeID ownership</u></p> <p>GO 128 Rule 17.8:</p> <p><i>Manholes, handholes, subsurface and self-contained surface-mounted equipment enclosures shall be marked as to ownership to facilitate identification by persons authorized to work therein and by other persons performing work in their vicinity.</i></p> <p>The junction box was missing identification of MeID ownership.</p>		

D.	Location:	Pole, Gertrude and Leah, Merced
	Pole No.:	N/A
	Previous Visit by Utility:	10/11/11
	Date Visited by CPUC:	10/21/11
Explanation of Violation(s):		
<p data-bbox="347 646 857 684"><u>High Voltage Signs Not Clearly Legible</u></p> <p data-bbox="347 720 604 758">GO 95 Rule 51.6 A:</p> <p data-bbox="347 793 1507 869"><i>Such signs shall be of weather and corrosion-resisting material, solid or with letters cut out therefrom and clearly legible.</i></p> <p data-bbox="347 905 1471 980">The pole at this location had High Voltage Signs that appeared burnt on the crossarm and not clearly legible.</p>		

E.	Location:	Scoto Farms and SP, Merced
	Pole No.:	N/A
	Previous Visit by Utility:	7/22/11
	Date Visited by CPUC:	10/21/11
Explanation of Violation(s):		
<p data-bbox="345 720 773 751"><u>Replace Broken Bolt in Crossarm</u></p> <p data-bbox="345 793 573 825">GO 95 Rule 31.1:</p> <p data-bbox="345 867 1458 972"><i>Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.</i></p> <p data-bbox="345 1014 1401 1045">The bolt on the crossarm on this pole is broken and needs to be repaired or replaced.</p>		

III. Concerns and Recommendations

This section discusses any additional items found during the audit that USRB has concerns about. These items are not necessarily rule violations.

A. **Update Inspection And Maintenance Practices For Overhead And Underground Electric Transmission And Distribution Lines**

MeID's written maintenance program meets or exceeds the minimum requirements contained within General Order 165; however, the written maintenance program has not been approved by MeID management nor does MeID follow the program.

Please provide an updated and approved copy of the maintenance programs.