

City of Biggs

City Administrator agenda item request for the next
(X) Regular () Adjourned Regular () Special Meeting
Meeting Date: December 19, 2011 6:00PM

Date: December 6, 2011
To: Honorable Mayor and Members of the City Council
From: City Administrator
Subject: Electric Maintenance System Audit (Action)

Council is asked to acknowledge receipt of GO165 (Government Order #165) infrastructure and equipment audit by outside visitor, and acknowledge receipt of department superintendent response.

Background:

The California Public Utilities Commission took it upon itself to visit public power distribution facilities this year to evaluate compliance with State mandates for inspection and maintenance of physical facilities. For Biggs, this inspection is considered a "staff assistance visit" which does not engender obligations on the part of the City. State paid inspector expenses. The inspection visit went well and identified several areas in which we can do better.

Attachments:

CPUC Inspection Documents
G-BE Department superintendent response and follow-up letter

Recommendation:

Acknowledge activity and receipt of correspondence.

Fiscal Impact:

None for this action, although GO165 compliance is resulting in \$8000-17,000/yr expenses for intrusive and passive inspection work, pole and apparatus replacement, etc., all from Electric Fund.

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



December 1, 2011

EA2011-24

Gary Davidson
Electric Superintendent
City of Gridley
685 Kentucky St
Gridley, CA 95948

Subject: City of Biggs Electric Audit

Dear Mr. Davidson:

On behalf of the Utilities Safety and Reliability Branch (USRB) of the California Public Utilities Commission (CPUC), Kenneth How and I conducted an audit of the City of Biggs (Gridley's) electric distribution system from September 26-28, 2011. The audit included a review of the City of Biggs's records for April 2007 through September 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 January 2, 2012, Gridley must send me a response to this letter detailing its plans to address those violations and when Gridley 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,

A handwritten signature in black ink, appearing to read "Ivan Garcia", written over a horizontal line.

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

Enclosures: Audit Summary

CC: Kenneth How, 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 The City of Bigg's (Gridley's) maintenance records.

A. No GO 165 Patrols or Inspections Documented Prior to September 2011

GO 165, specifies the frequencies a utility must patrol and perform detailed inspections on its facilities. Gridley did not have any documented patrols or detailed inspections for the April 2007 through August 2011 period. In September 2011, Gridley only performed an overhead patrol of its system. Gridley must perform and document patrols and detailed inspections as required by GO 165.

B. Not All Identified Problems Documented During Patrols

GO 165 Part IV states in part:

For all inspections, within a reasonable period, company records shall specify the circuit, area, or equipment inspected, the name of the inspector, the date of the inspection, and any problems identified during each inspection, as well as the scheduled date of corrective action.

GO 165 requires utilities to write down any problems they find during their inspections. At the time of the audit, Gridley indicated that it did not write down problems found on poles scheduled for replacement. Gridley must record these problems in order to be compliant with GO 165.

C. 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 Gridley was not performing diagnostic testing on its capacitors and switching/protective devices. Gridley must diagnostically test GO 165 listed equipment as appropriate, per, at a minimum, the detailed inspection cycles outlined in GO 165.

D. No Pole Loading Calculations

GO 95 Section IV covers the mechanical strength requirements for all lines. Utilities must be able to show that facilities meet these GO 95 strength requirements during the installation of new poles or when newly installed facilities negatively impact the strength of a pole. At the time of our audit, Gridley was not performing pole loading calculations. The calculations were also excluded for new construction and new facilities. Gridley must perform pole loading calculations in order to show that it is compliant with the pole strength requirements required by GO 95.

II. Field Violations

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

A.	Location:	Padmount, Little League Park Transformer, Biggs, CA
	Equipment ID:	Unknown
	Previous Visit by Utility:	N/A
	Date Visited by CPUC:	9/27/11
Explanation of Violation(s):		
<u>No identification of ownership</u>		
GO 128 Rule 17.8:		
<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>		
The pad mount transformer had no identification of ownership and transformer number.		
<u>Cables not Identified</u>		
GO 128 Rule 35.1 Identification of Cables		
<i>Cables operating at a voltage in excess of 750 volts shall be permanently and clearly identified by tags or other suitable means to indicate their operating voltage and the circuit with which they are normally associated at each manhole or other commonly accessible location of the underground system.</i>		
The primary cables in this pad mount transformer were not marked with associated circuit and operating voltage.		

B.	Location:	Pole, 3084 9 th St. Biggs, CA
	Equipment ID:	#318
	Previous Visit by Utility:	Unknown
	Date Visited by CPUC:	9/28/11

Explanation of Violation(s):

Missing High Voltage Sign

GO 95 Rule 51.6 A3:

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

The pole at this location was missing a high voltage sign.

Broken Ground Molding

GO 95 Rule 54.6 B:

That portion of the ground wires attached on the face or back of wood crossarms or on the surface of wood poles and structures shall be covered by a suitable protective covering

The ground molding was broken at this location.

C.	Location:	Pole, 1 st pole corner of 9 th and E St., Biggs, CA
	Equipment ID:	#311
	Previous Visit by Utility:	Unknown
	Date Visited by CPUC:	9/28/11
	Explanation of Violation(s):	
		<u>Primary Down Guy Touching Communication Span</u>
		GO 95 Table 2 Case 19C requires a 3 inch clearance between guys in proximity and communication conductors.
		The primary down guy was touching a communication span at this location.

D.	Location:	Pole, 2 nd pole corner of 9 th and F St., CA
	Pole No.:	

Previous Visit by Utility:	Unknown
Date Visited by CPUC:	9/28/11
Explanation of Violation(s):	
<p><u>Tree branches found below sectionalizing insulator on the anchor guy</u></p> <p>GO 95 Rule 56.7 Location of Sectionalizing Insulators, Anchor Guys reads in part:</p> <p><i>In order to prevent trees, buildings, messengers, metal-sheathed cables or other similar objects from grounding portions of guys above guy insulators, it is suggested that anchor guys be sectionalized, where practicable, near the highest level permitted by this Rule.</i></p> <p>Tree branches need to be trimmed below insulator guy bob.</p>	

E.	Location:	Pole, Corner of 9 th and C St., Biggs, CA
	Pole No.:	306
	Previous Visit by Utility:	Unknown
	Date Visited by CPUC:	9/28/11
Explanation of Violation(s):		
<p><u>Missing High Voltage Sign</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>		

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F.	Location:	Pole, Across from 3019 9 th St., Biggs, CA
	Pole No.:	303
	Previous Visit by Utility:	Unknown
	Date Visited by CPUC:	9/28/11
	Explanation of Violation(s):	
<u>Missing guy guard</u>		
GO 95 Rule 56.9 Guy Marker (Guy Guard):		
<i>A substantial marker of suitable material, including but not limited to metal or plastic, not less than 8 feet in length, shall be securely attached to all anchor guys. Where more than one guy is attached to an anchor rod, only the outermost guy is required to have a marker.</i>		
The guy guard was missing at this location.		

G.	Location:	Pole, 3 rd pole in rice mill, Biggs, CA
	Pole No.:	323
	Previous Visit by Utility:	Unknown
	Date Visited by CPUC:	9/28/11
	Explanation of Violation(s):	
<u>Missing guy guard</u>		
GO 95 Rule 56.9 Guy Marker (Guy Guard):		
<i>A substantial marker of suitable material, including but not limited to metal or plastic, not less than 8 feet in length, shall be securely attached to all anchor guys. Where more than one guy is attached to an anchor rod, only the outermost guy is required to have a marker.</i>		
The guy guard was missing at this location		

H.	Location:	Pole, Across 2961 10 th St., Biggs, CA
	Pole No.:	327
	Previous Visit by Utility:	Unknown
	Date Visited by CPUC:	9/28/11
Explanation of Violation(s):		
<u>Missing guy guard</u>		
GO 95 Rule 56.9 Guy Marker (Guy Guard):		
<p><i>A substantial marker of suitable material, including but not limited to metal or plastic, not less than 8 feet in length, shall be securely attached to all anchor guys. Where more than one guy is attached to an anchor rod, only the outermost guy is required to have a marker.</i></p>		
The guy guard was missing at this location.		

I.	Location:	Pole, 10 th and G St., Biggs, CA
	Pole No.:	345
	Previous Visit by Utility:	Unknown
	Date Visited by CPUC:	9/28/11
Explanation of Violation(s):		
<u>Missing High Voltage Sign</u>		
GO 95 Rule 51.6 A3:		
<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>		
The pole at this location was missing high voltage signs.		

J.	Location:	Pole, G and 9 th St., Biggs, CA
	Pole No.:	321
	Previous Visit by Utility:	Unknown
	Date Visited by CPUC:	9/28/11
Explanation of Violation(s):		
<p><u>Tree branches found below sectionalizing insulator on the anchor guy</u></p> <p>GO 95 Rule 56.7 Location of Sectionalizing Insulators, Anchor Guys reads in part:</p> <p><i>In order to prevent trees, buildings, messengers, metal-sheathed cables or other similar objects from grounding portions of guys above guy insulators, it is suggested that anchor guys be sectionalized, where practicable, near the highest level permitted by this Rule.</i></p> <p>Tree branches need to be trimmed below insulator guy bob.</p> <p><u>Missing guy guard</u></p> <p>GO 95 Rule 56.9 Guy Marker (Guy Guard):</p> <p><i>A substantial marker of suitable material, including but not limited to metal or plastic, not less than 8 feet in length, shall be securely attached to all anchor guys. Where more than one guy is attached to an anchor rod, only the outermost guy is required to have a marker.</i></p> <p>The guy guard was missing at this location</p>		

K.	Location:	Pole, 3035 6 th St., Biggs, CA
	Pole No.:	208
	Previous Visit by Utility:	Unknown
	Date Visited by CPUC:	9/28/11
Explanation of Violation(s):		

Missing High Voltage Sign

GO 95 Rule 51.6 A3:

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

The pole at this location was missing high voltage signs.

III. Concerns and Recommendations

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

A. Pole Loading Calculations on all Pole Replacement Work

In part due to the pole loading calculation issues we found during our Audit (see I.D.), we recommend that Gridley perform pole loading calculations on all pole replacement work, even if the facilities attached to the replacement poles do not change.

B. Inspection of Splice Boxes/Junction Boxes

We recommend that Gridley perform regular inspections of the facilities in its splice and junction boxes.

December 2, 2011

**TO: Ivan Garcia
CPUC**

**FROM: Gary Davidson
Electric Superintendent
Gridley, Ca.**

Dear Mr. Garcia,
Please find my response to your Audit Summary for the City of Gridley during your inspection September 26-28, 2011. It was a pleasure meeting you and Mr. How receiving direction on how to properly perform and keep GO 165 documentation. If you have questions or concerns with the reply, please contact me for clarification.

Gary Davidson
Electric Superintendent
City of Gridley/Biggs
530 846 5954
530 846 8310 fax
gddavidson@gridley.ca.us

AUDIT SUMMARY

I. RECORD VIOLATIONS

- A. As stated when you were here, inspections will be carried out per GO 165 each year with records kept. We completed our patrol for GO 95 overhead and plan on a GO 128 underground patrol by the end of June 2012.**
- B. During our 2012 GO 95 and 128 patrols we will record and document all problems. This will be accomplished by the end of June 2012 and continue by the GO 165 cycles.**
- C. During our 2012 Patrol the capacitors will be tested and documented by the end of June 2012. Our switching/protective devices (Line Reclosers) have been tested each year, but will improve on the record keeping for the purpose of audits.**
- D. We are in the process of obtaining a pole loading calculation program at this time and put into practice the calculations of any poles replaced or for new construction in the future.**

II. FIELD VIOLATIONS

There were 11 Field Violations that you inspected and documented that need to be corrected. There were no hazards to the public so no immediate action is necessary. All these infractions will be corrected by the end of June 2012.

III. CONCERNS AND RECOMMENDATIONS

A. & B. As stated in the Record Violations, we will implement the load calculations in the future and implement your direction on inspecting our splice boxes and junction boxes.