

City of Biggs/ Gridley

Electrical Department

685 Kentucky St

Gridley, Ca 95948

June 29, 2015

Mark Sorenson

City of Biggs

Electrical Director

Subject: 2014-2015 Preventive Maintenance Report

***Overhead/Underground Preventive***

***Maintenance Program for 2014-2015 is as follows***:

* No changes have been made to the City Of Biggs’s “Utility Pole and Electrical Distribution System Preventive Maintenance Program” or our Annual Substation maintenance program.
* The Annual visual Patrol of our Overhead Electrical System produced 50 class 2 (non-emergency repair condition) repair tags.
* 35 repair tags were completed in 2014-2015
* 5 repair tags from 2014-2015 were added to the 2015-2016 repair tag list.
* Total repair tags for 2015-2016 is 55.
* Work has begun to address these repair tags which consist of Ground molding, Visibility Strips, and High Voltage sign replacement.
* The pole test and treatment program completed in 2010 produced 15 Priority 1 pole replacements, to date 8 have been replaced, 3 Priority 2 replacements, to date 1 has been replaced, and 19 Priority 3, to date 1has been replaced.
* Detailed inspections on the Underground system performed in 2015 generated 11 priority 2 (non- emergency) repair tags that consist mainly of cleaning and numbering/sticker placement.



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***As part of Biggs’s Substation Inspection/Maintenance Program we have completed the following:***

***Weekly Visual Check of the Following:***

* Fence line and Gates.
* Buss structure.
* External of the Transformer.

***Weekly Documentation of the following:***

* Outside Temperature.
* Transformer gas pressure.
* Max Transformer Winding Temperature.
* Max Liquid Temperature.
* Main Breaker Voltage.
* Main Breaker Amperage.

***Monthly Documentation of the following:***

***Power Transformers:***

* Appearance.
* Bushings Clean, Good Condition.
* Oil Levels and Gauges “OK”
* Free from Oil leaks.

***Load Tap Changer (LTC):***

* Appearance “OK”
* Free from oil leaks.
* Mechanisms “OK”

***Circuit Breakers:***

* Appearance “OK”
* Bushings clean, Good condition.
* Oil Levels and Gauges “OK”
* Arrestors.
* Insulators.
* Battery room/Charger.
* Transformer Tap setting.
* Circuit Line to Neutral Voltage A, B, C, phases.
* Circuit Amperage A, B, C, phases.
* Circuit Power Factor.
* Relay Target Counter.
* Relay Targets.
* Thermometers “OK” Maximum Reset.
* Aux. cooling Equipment “OK”
* Gas Pressure “OK”
* Cabinet gaskets weather tight.
* Counter readings Recorded
* Compensator Setting Recorded
* Free from Oil Leaks
* Space Heaters Operative
* Relay targets reset
* Indicating lights “OK”
* Counter Readings Recorded



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| ***Air Break and Disconnect Switches:***   * Appearance “OK” * Insulators “OK” * Ground Connections “OK” |  |
| ***Battery and Charger:***   * Electrolyte Levels “OK” * Cell tops Clean and dry. * Terminals & Connections “OK” | * Charger operation “OK” * Readings Recorded. |

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| ***Miscellaneous Electrical Equipment:***   * Arrester Appearance “OK” * Arrester Correctly Connected. * Dry type Transformer “OK” * Switch Stick “OK” Properly Stored. * High Voltage fuses “OK” | * Spare Fuses Properly Stored. * Buses and Connections “OK” * Burn-out Lamps Replaced. * Cabinets and Cubicles “OK” |
| ***Safety:***   * Equipment Grounds “OK” * Fences and Gates Grounded. * Exits, walkways, Driveways clear. * Substation enclosure Free from stored Material   And equipment. | * NESC Clearances Complied with. * Substation area properly lighted * Yard clean and free of weeds. * Gates Properly Locked * Suitable Warning Signs on Fences. |
| ***Yard and Structures:***   * Fences and Gates Adequate * Yard Properly Surfaced. | * Structure paint “OK” * Fence and Gate paint “OK” |
| ***Annual Testing:***   * Oil of all oil filled Apparatus. * Metal Clad Breakers. * Vacuum Breakers. * Electronic Relays | * Electro-mechanical relays in service. * Substation Transformer * Substation batteries. * Back-up 12 kv feed L/R. |

***Biennial Testing:***

* Capacitor Banks.

***Daryl Dye***

***Electrical Superintendent***