

 City of Gridley Staff Report

 Electrical Department

 685 Kentucky St

 Gridley, Ca 95948

 To: Gridley City Council Members.

 Dean Price, Interim City Administer

 From: Daryl Dye

 Electrical Superintendent

 Date: July 7, 2015

 Subject: 2014-2015 Overhead/Underground Preventive Maintenance Program

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 ***The City of Gridley’s 2015 Annual Report for its Utility Pole and Electrical Distribution System Preventive***

 ***Maintenance Program is as follows:***

* No changes have been made to the City Of Gridley’s “Utility Pole and Electrical Distribution System Preventive Maintenance Program” or our Annual Substation maintenance program.
* The Annual Patrol of our Overhead Electrical System in 2015 produced 30 class 2 (non-emergency repair condition) repair tags for 2015-2016
* 57 class 2 repair tags were completed in 2014-2015.
* The pole test and treatment program completed in 2010 produced 22 Priority 1 pole replacements, to date 21 have been replaced, 15 Priority 2 replacements, to date 6 have been replaced, and 76 Priority 3, to date 10 have been replaced.
* Detailed inspections were completed on our underground electrical system during 2015.

The inspections generated 42 class 2 (non-emergency repair condition) repair tags.

These tags will be completed in 2015-2016.

 ***As part of Gridley’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 transformers.
* Arrestors.
* Insulators.
* Battery room/charger.

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

* Outside Temperature.
* Nitrogen Bottle pressure.
* Transformer Nitrogen Pressure.
* Max Transformer Winding Temperature.
* Max Liquid Temperature.
* Main Breaker Voltage
* Main Breaker Amps.

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* 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.

 ***Monthly Documentation of the Following:***

***Power Transformers:***

* Appearance.
* Bushings Clean, and Good Condition.
* Oil Levels and Gauges OK.
* Free from Oil Leaks
* Thermometers OK, Maximum reset.
* Aux. cooling Equipment OK.
* Gas Pressure OK.

***Regulators:***

* Appearance OK.
* Bushings Clean, Good Condition.
* Oil Levels and Gauges OK.
* Free from Oil Leaks.
* Thermometers OK, Maximums Reset.
* Mechanisms OK.
* Indicating Glass covers intact.
* Cabinet Gaskets weather Tight.
* Counter Readings Recorded.
* Compensator Setting Recorded

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***Circuit Breakers:***

* Appearance OK.
* Bushings Clean, Good Condition.
* Oil Levels and Gauges OK.
* Free from Oil Leaks.
* Space Heaters Operative.
* Relay targets reset.
* Indicating lights OK.
* Control Cabinets and Gaskets OK.
* Counter Readings Recorded

***Solar Protection:***

* 1103 L/R Closed.
* V/R Closed.
* Annunciator Tested and Clear.

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***Air Break and Disconnect Switches:***

* Appearance OK.
* Insulators OK.
* Ground Connections to Handle OK

 ***Bypass Switches:***

* Appearance OK.
* Insulators OK.

 ***Battery and Charger:***

* Electrolyte Levels OK.
* Cell Tops Clean and Dry.
* Terminals & Connections OK.
* Charger Operation OK.
* Necessary Readings Recorded

***Miscellaneous Electrical Equipment:***

* Arrester Appearance OK.
* Arresters Correctly Connected.
* Capacitor Tanks, Bushings, Fuses OK.
* Instrument Transformers OK.
* Aux. Power Transformers OK.
* Switch Sticks Ok, Properly Stored.
* Phases Properly Identified.
* Ground Indicating Lights OK.
* High voltages Fuses OK.
* Spare Fuses Properly Stored.
* Buses and Connections OK.
* Burned-out Lamps Replaced.
* Overhead Ground Wire OK.
* Cabinets and Cubicles OK

***Safety:***

* Equipment Grounds OK.
* Fences and Gates Grounded.
* Exits, walkways & Driveways clear.
* Substation Enclosure Free of 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.
* T-1 & T-2 Substation Transformers.
* Substation Batteries.



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***Biennial Testing:***

* Line Re-closer (L/R)
* Capacitor Banks.

Should you have any questions concerning our inspection process, please feel free to contact me.

Daryl Dye

City of Gridley

Electrical Department Superintendent.

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