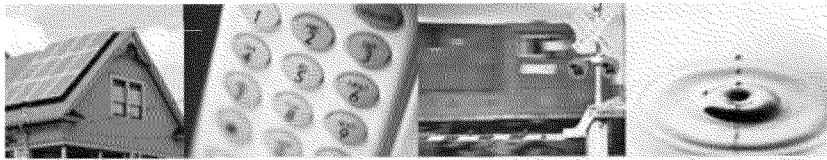


PG&E Metcalf Incident and Substation Security



Raymond Fugere, PE
Safety and Enforcement Division



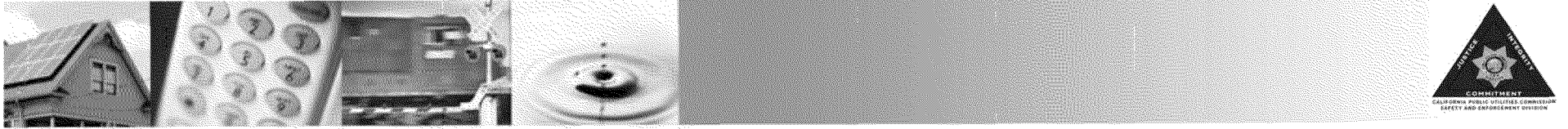


Agenda

Objective: Provide an overview of the April 16, 2013 Metcalf Incident and Substation Security

- Overview of Event
- Damage to PG&E
- Post Event Actions
- Next Steps

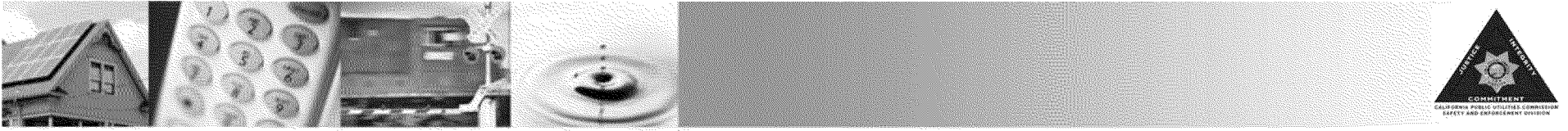




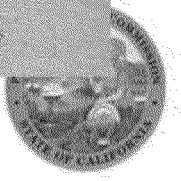
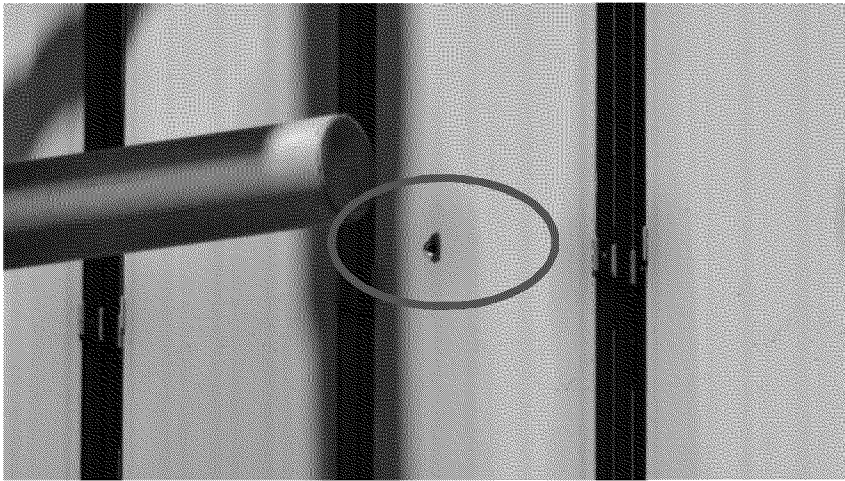
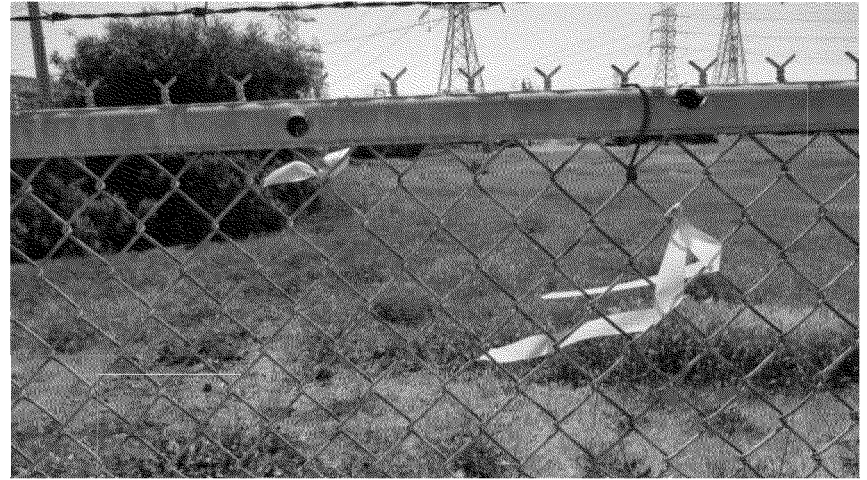
Event summary

- 0058 Hours
 - AT&T Fiber Cut
- 0107 Hours
 - Level 3 Line Cut
- 0137 Hours
 - Fence Alarm Activated
- 0138 Hours
 - Initial Transformer System Alarm
- 0141 Hours
 - 911 Call - Shooting
- 0151 Hours
 - Police Arrive On Scene



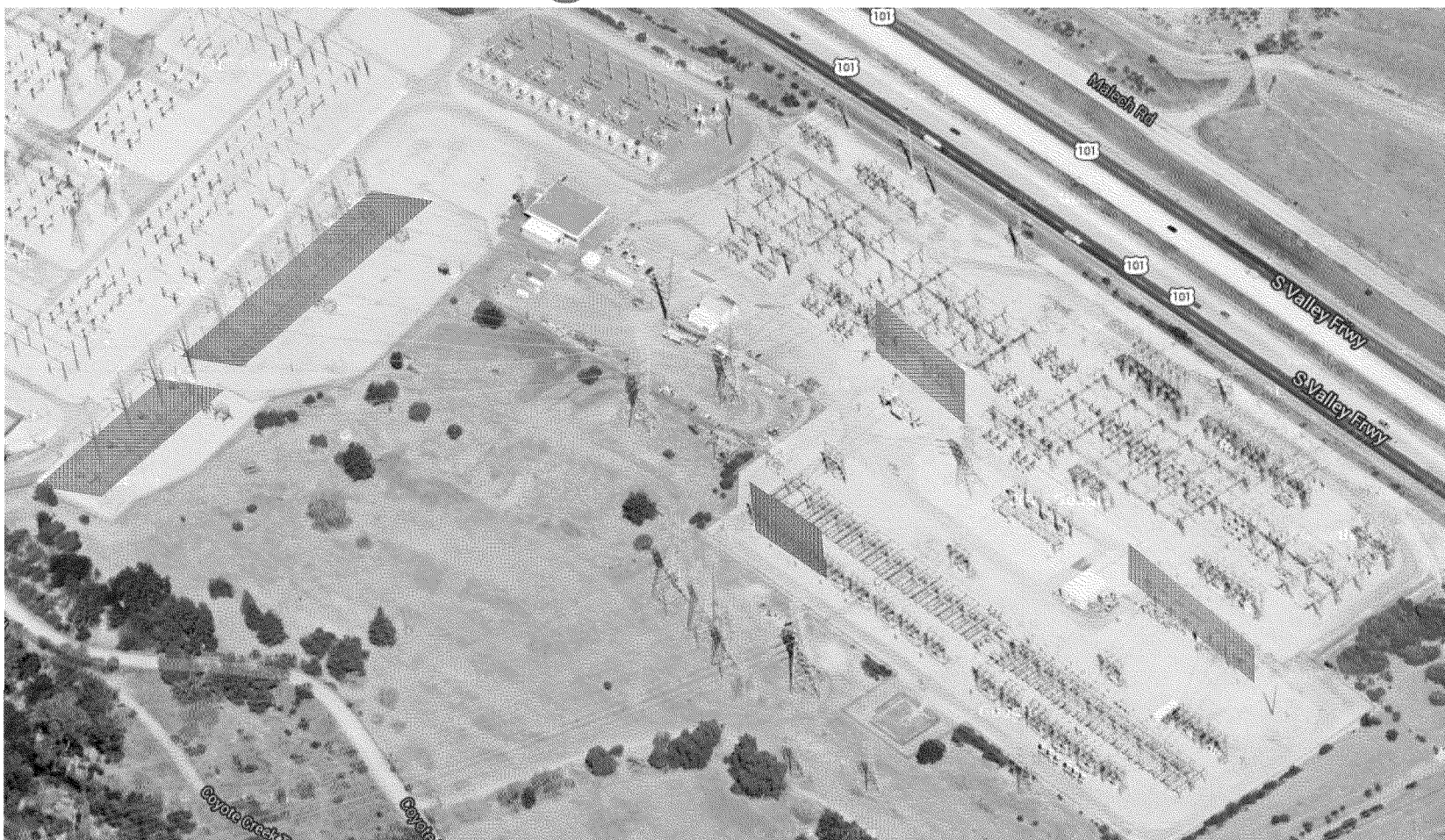


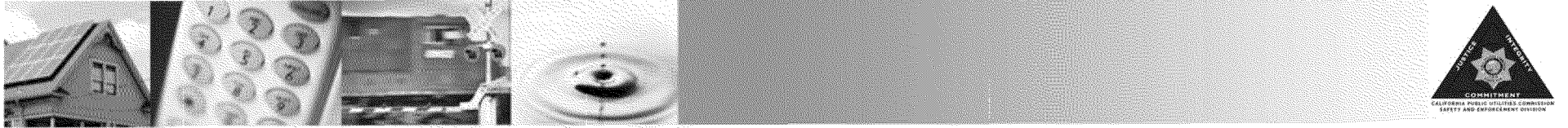
Damage at Scene





Damage to Substation

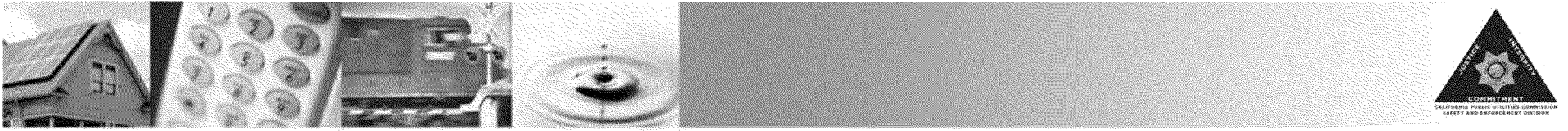




Damage to Facilities

- 500kV Yard
 - 10 transformers
- 230kV Yard
 - 7 transformers
- 115kV Yard
 - 6 circuit breakers
- Total of 52,000 gallons of oil
- \$15.4 in restoration costs
- No outages

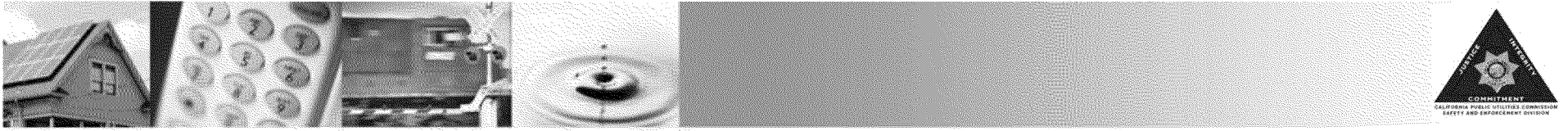




SED Interactions With Substations

- 2013 Launched Substation Audit Program
 - Focused on Non-FERC jurisdictional substations
 - Audit utility versus current programs
 - Have found some security issues
- Prior Incidents
 - Copper Theft
 - Trespassing
 - Equipment Failures

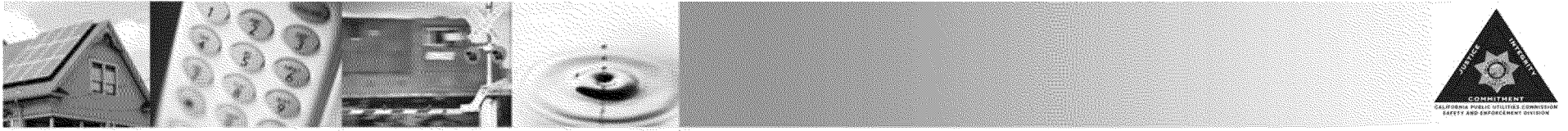




Post Event

- Immediate:
 - Restoration
 - Investigation (FBI)
 - Security at critical substations, Vegetation
- Long Term:
 - Evaluation of current internal security measures
 - Cameras , Lighting, Fences
 - Enhanced Intrusion Detection
 - Evaluation of external security measures
 - Coordination with Law Enforcement
 - Coordination with Communication Companies

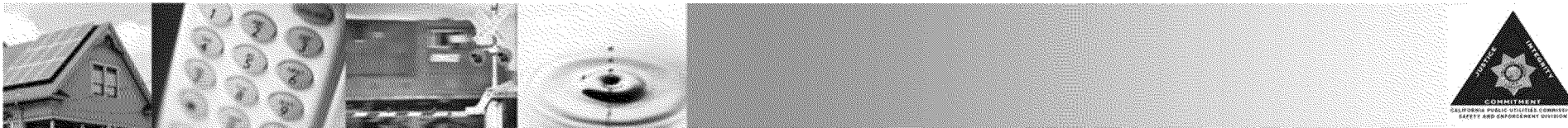




Next Steps

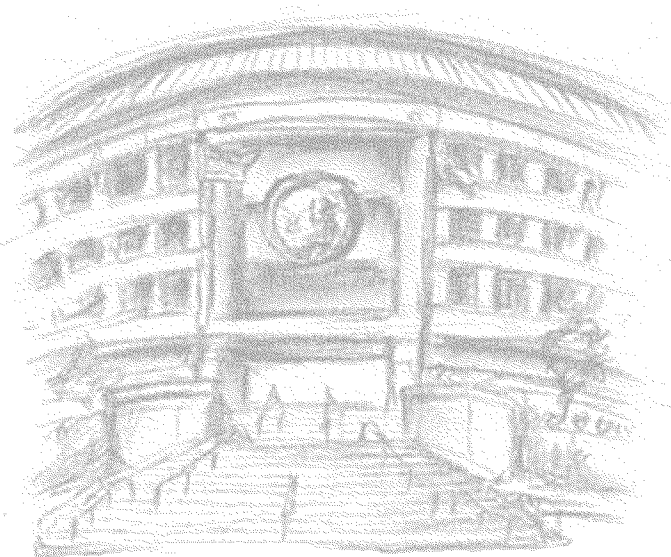
- Monitor FERC/NERC
- Examine:
 - Changing Security requirements for Substations
 - Revising GO 166: Emergency Preparedness
 - New Mexico Training For Police Offices





Thank You!

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