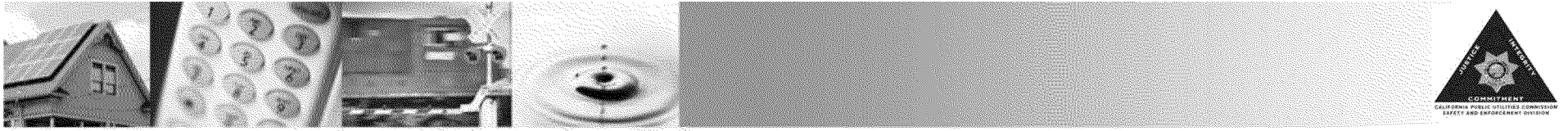


# PG&E Metcalf Incident and Substation Security



Raymond Fugere, PE  
Safety and Enforcement Division



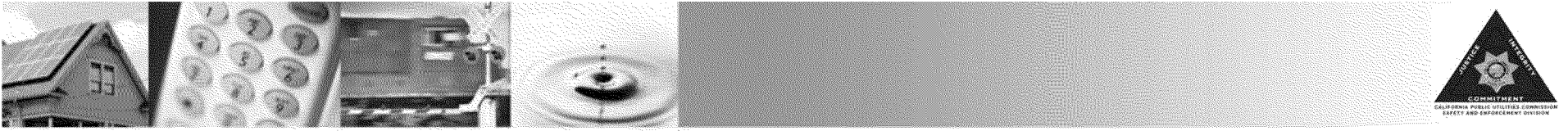


# Agenda

**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

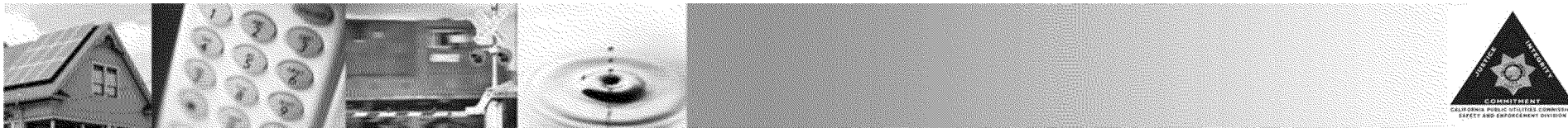




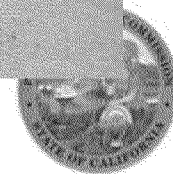
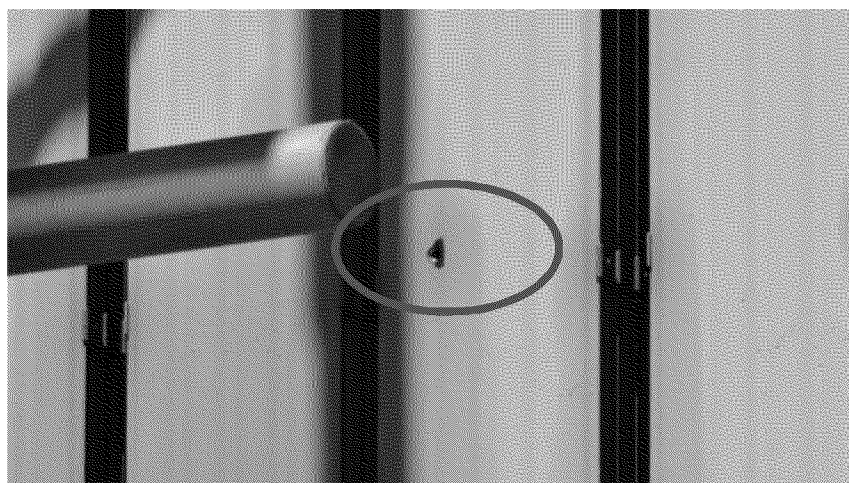
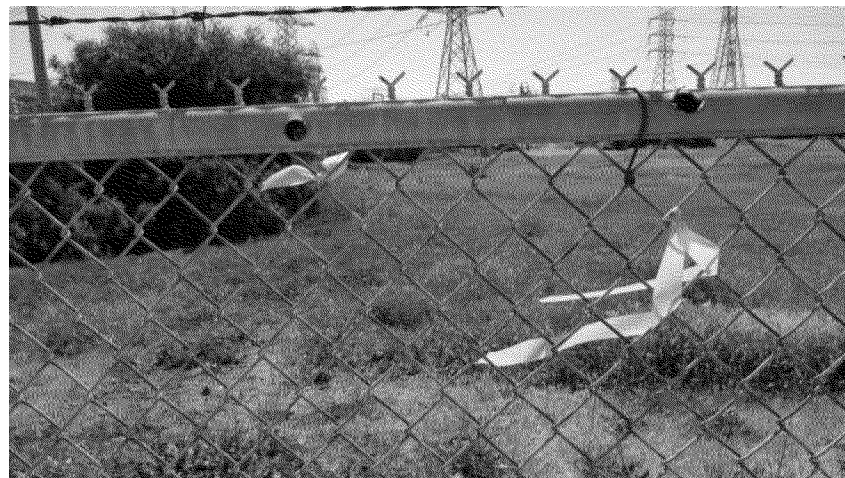
## Event summary

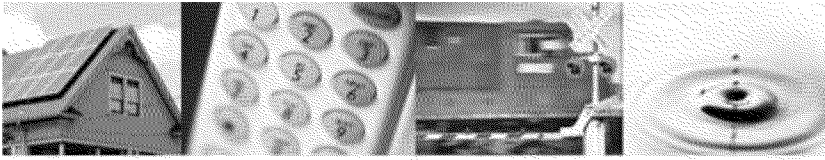
- 0058 Hours
  - AT&T Fiber Cut
- 0107 Hours
  - Level 3 Line Cut
- 0137 Hours
  - Fence Alarm Activated
- 0138 Hours
  - Initial Transformer System Alarm
- 0141 Hours
  - 911 Call - Shooting
- 0151 Hours
  - Police Arrive On Scene



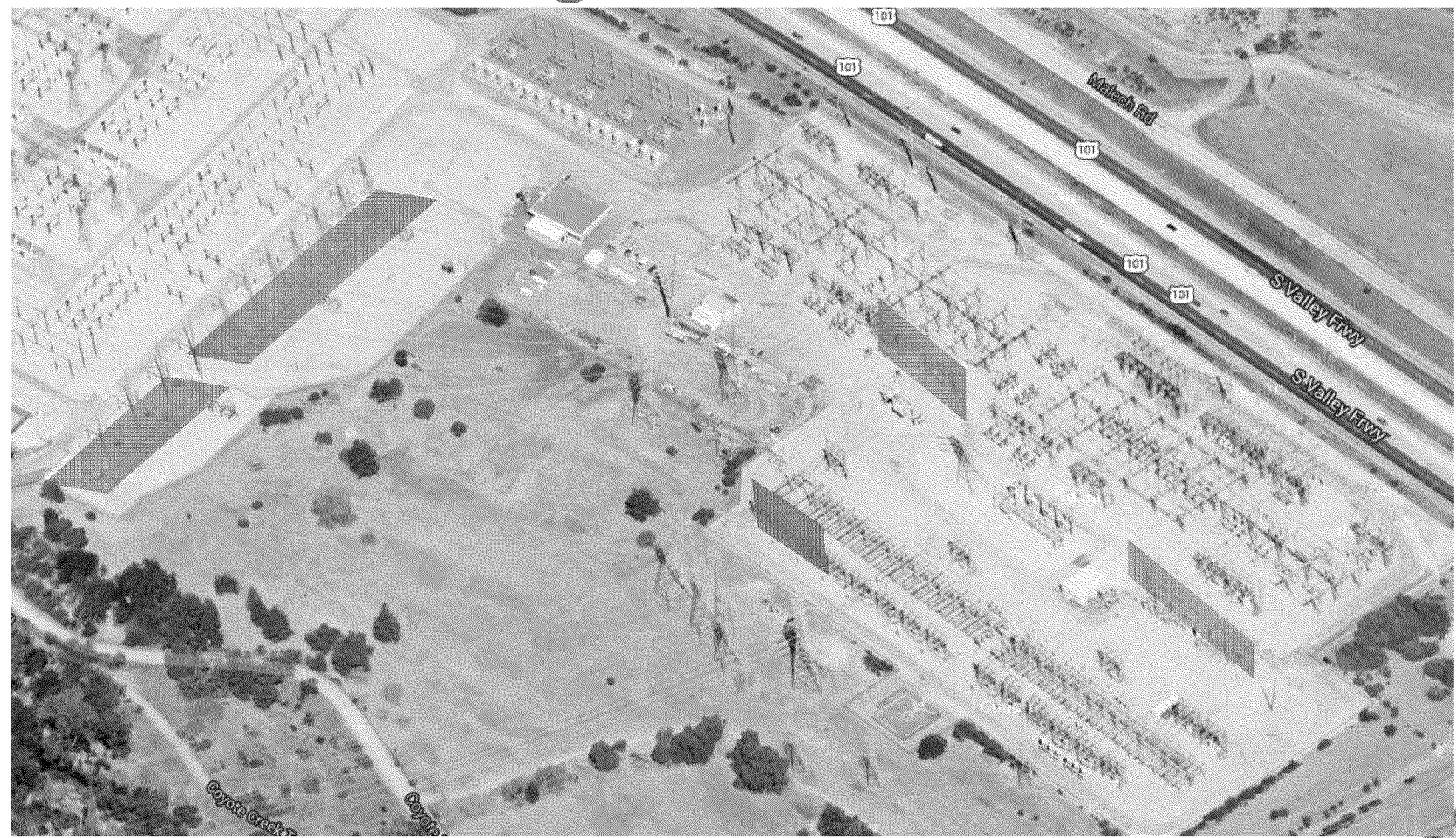


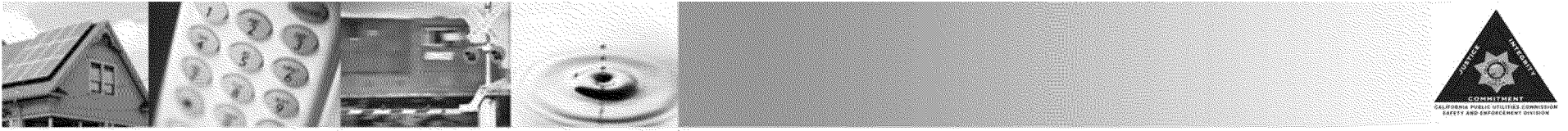
## Damage at Scene





# Damage to Substation

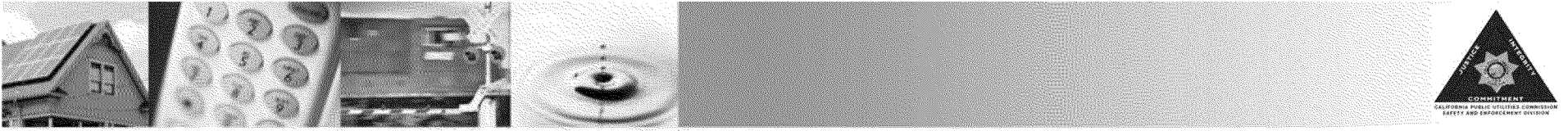




# Damage to Facilities

- 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

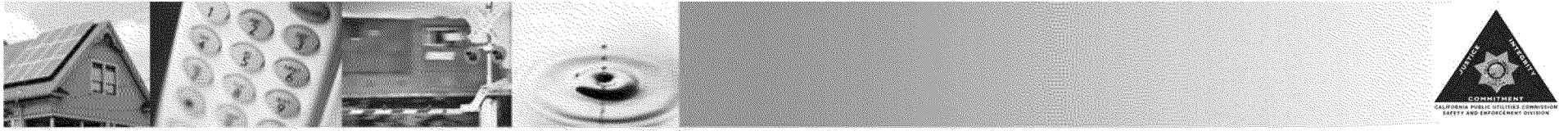




# SED Interactions With Substations

- 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



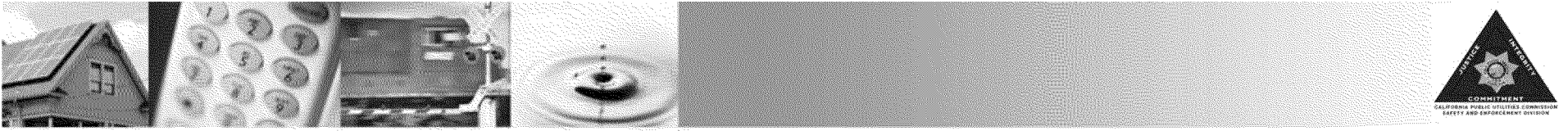


# Post Event

- 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



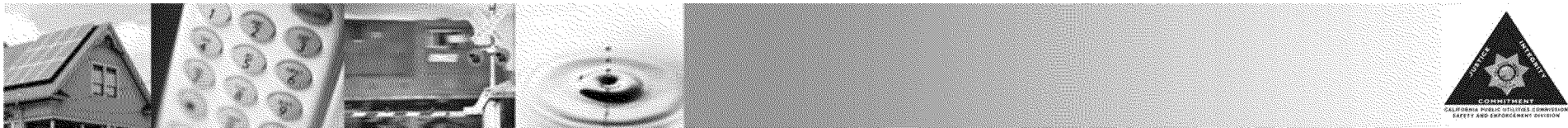




## Next Steps

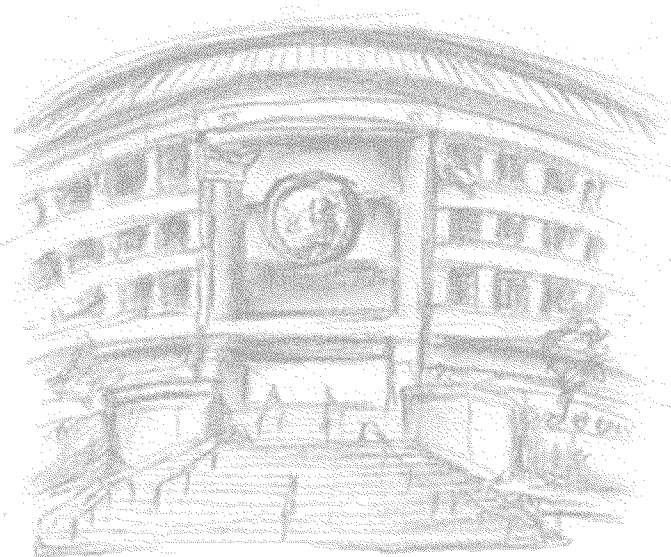
- Monitor FERC/NERC
- Examine:
  - Changing Security requirements for Substations
  - Revising GO 166: Emergency Preparedness
  - New Mexico Training For Police Offices





# Thank You!

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