## Gas/Electric System Interaction Workshop PSE Building, Summit Room Bellevue, Washington March 28, 2014

## Agenda Items

8:30 am Coffee, tea, fruit and bagels

9:00 am Commence meeting

- 1. Introduction Alan (15 minutes)
  - o Parking validation
  - o Restrooms
  - o Where to congregate in the event of an emergency
  - o Agenda
    - Workshop interruptions are encouraged
    - Share experiences, photos and samples
- 2. Background Duane (15 minutes)
  - o Why meet?
    - Pinehurst Settlement
  - Meeting objectives
  - Sharing information
- 3. Case history Pinehurst Michelle (45 minutes)

10:15 am Break (15 minutes)

- 4. Electrical Ground Fault Basics/Electrical Grounding System Mark (45 minutes)
  - o How electrical energy gets on the gas system
    - Direct contact
    - In-direct contact
    - House grounding
- 5. Under Ground Cable Faults Chris (30 minutes)
  - o How cables fail
    - Breakdown of insulation between conductor and neutral
    - Corroded bare concentric neutrals
    - Vintages of cable subject to failures

11:30 pm lunch (45 minutes)

- 6. Recognizing damage caused by a ground fault Alan (30 minutes)
  - Photos and examples
  - o Characteristics of Electrical Arcing Damage
    - Arc burns at meter spuds
    - Meter Set/Fuel Line interaction
    - Tracer wire and PE pipe
    - Burn through of buried steel pipe
- 7. Leak Surveys Michelle (30 minutes)
  - o Determining Leak Survey Boundaries
    - Source of energy
      - substations
      - Lightning
      - Transmission
      - Distribution

- Pipe material affected
  - Steel
  - Plastic
- Other utilities
  - Are lights out
  - Cable TV problems
  - Water leaks
- o Timeframe for completing survey
- o Facilities to be surveyed
  - Overlay gas maps with electric maps
    - Black Diamond (4 Corners) event

1:15 pm break (15 minutes)

- 8. Coordination with Electric Utility Open discussion (30 minutes)
  - o Electric Utility Contact Numbers
  - o Questions to ask of Electric Utility
    - Circuit involved
    - Substation feeding the circuit
    - Location of the source substation
    - Type of grounding system
- 9. Use of Integrity Surveys Open discussion (30 minutes)
  - During the event
    - Find shorted insulators at meters and system boundaries
    - Blown fuses at rectifiers
    - Damaged bond cables
  - o Post event
    - Locate coating damage (ACVG/DCVG)
    - Find damaged tracer wire
- 10. Job aid Open discussion (30 minutes)
  - o Develop a job aid based on experiences of those present

3:00 pm

Adjourn meeting