Gas QA/QC Approach to Inspector Training

2019 NGA Fall Operations Conference
Winter is fast approaching and as such driving conditions will begin to deteriorate. Keep yourself prepared and safe by doing the following:

**Driving/Commute**

- Reduce vehicle speed
- Allow for increased duration of commute to and from
- Increase following distances
- Keeping ice melt, a shovel and a blanket in the vehicle will help in the event an emergency arises
- Replace worn windshield wipers
- Have your tires (tread life) and tire pressure, and engine coolant protection checked by a professional
- Keep mirrors, windshield and vehicle lighting clean
- Ensure you have a spare bottle of windshield washer in your vehicle

Keep yourself and your family safe!
Historical Background…

2008 Merger – June 2011
Gas Program Structure:
• Three regional managers
  - New England
  - Downstate NY
  - Upstate NY
• Managers report to Director of PSM
• New England & Downstate teams comprised of Mgmt. & Represented employees
• Approx. 30 total field inspectors

Re-Org: July 2011 – April 2019
Gas Program Structure:
• Three separate regions
• One departmental manager for all three regions
• Manager reports directly to VP PSM
• New England & Downstate teams comprised of Mgmt. & Represented employees
• Approx. 20% reduction to staff

Re-Org: April 2019 – Present Day
Gas Program Structure:
• Four jurisdictions
  MA
  RI
  DNY
  UNY
• One Manager per each jurisdiction
• Managers report to respective jurisdictional Directors
• Increased team staffing – All Management Employees
QA/QC Inspection Program

2008-2019

“Real-Time”
1. Maintain & Construct (M&C)
2. Customer Metering Services (CMS)
3. Instrumentation & Regulation (I&R)

“Post-Inspection”
1. “Annual” ReDig
2. “Focused” ReDig

2019

“Real-Time”
1. Maintain & Construct (M&C)
2. Customer Metering Services (CMS)
3. Instrumentation & Regulation (I&R)
4. Gas Leakage (Survey, Investigation, Response, etc.)
5. Corrosion
6. Damage Prevention
7. Operator Qualification

“Post-Inspection”
- Annual & Focused ReDig
Inspector Classification 2019: All Jurisdictions/Regions

1. **Technical Inspector**: Possesses limited or no field operations experience. Should have some audit or QA/QC experience.

2. **Senior Technical Inspector**: Possesses approx. 3+/- years field experience (Minimum of one discipline)

3. **Lead Technical Inspector**: Possesses approx. 3 – 5 years field experience in multiple disciplines

**Note:** Technical and Senior Inspectors have the ability for career advancement through successful completion of required training, increase in skill/knowledge base (multiple disciplines) and job performance.
Initial Training: UNY Technical Inspector

**Initial 30 Days:**

- Job shadow with peer inspector
- Secure required hardware and systems access
- Review and become knowledgeable of applicable O&M requirements
- Complete “Driver Safety” training (if necessary)

**30 – 60 Days:**

- Successfully complete initial progression series training (same training required of field technicians)
- Successfully complete OQ covered task qualifications applicable to training/knowledge learned through initial progression series modules.

**60 – 90 Days:**

- Apply learned knowledge and skill set through conducting of field inspections
- Lead Inspector and/or Mgr. evaluate progress/performance at conclusion of 60-90 day time frame.
Initial Training: UNY Senior Technical Inspector

Initial 30 Days:

- Job shadow with peer inspector
- Secure required hardware and systems access
- Review and become knowledgeable of applicable O&M requirements
- Complete “Driver Safety” training

30 – 60 Days:

- If progression series training or a portion thereof has been completed previously and inspector possesses corresponding OQ covered task qualifications, commence applying knowledge and skills via conducting field inspections.
  
- If progression series training or a portion thereof has not been previously completed, work with L&D on scheduling applicable modules

60 – 90 Days:

- Lead Inspector and/or Mgr. evaluate progress/performance at conclusion of 60-90 day time frame.
Initial Training: UNY Lead Technical Inspector

**Initial 30 Days:**

- Secure required hardware and systems access
- Review and become knowledgeable of applicable O&M requirements
- Complete “Driver Safety” training (if necessary)

**30 – 60 Days:**

- If progression series training or a portion thereof has been completed previously and inspector possesses corresponding OQ covered task qualifications, commence applying knowledge and skills via the conducting field inspections.
- If progression series training or a portion thereof has not been previously completed, work with L&D on scheduling applicable modules

**60 – 90 Days:**

- Mgr. evaluates progress/performance at conclusion of 60-90 day time frame.
Progression Series Training Content & Duration to Completion

**Gas Mechanic**

- “A” School = 10 Days
- Plastic Technologies = 10 Days
  - Minimally required OQ covered task qualifications completed
- “B” School = 20 Days
  - Majority of remaining OQ covered task qualifications completed
- “C” School = 5 Days
  - Remaining OQ covered task qualifications completed
- 45 total days of instruction and qualification

**Customer Metering Services (CMS)**

- “A” Rep School = 10 Days
  - Minimally required OQ covered task qualifications completed
- “B” Rep School = 14 days
  - Majority of remaining OQ covered task qualifications completed
- “C” School = 14 Days
  - Remaining OQ covered task qualifications completed

**Note:** Upstate NY CMS Reps perform cross functional duties (gas & electric). 38 total days of instruction and qualification are solely gas related.
Gas Leak/Corrosion/Damage Prevention & I&R

• Gas leakage survey, investigation & response have applicable learning and qualification modules within respective progression series training programs

• Damage Prevention and Corrosion learning and qualification modules reside within Gas Mechanic “B” school progression series programs

• Instrumentation & Regulation (I&R) training modules are under development within L&D
  - Current training includes both Gas Mechanic Progression along with field training provided by I&R supervisors
  - OQ testing through Pro-Metrics
Non – Technical Training

- National Grid provides non-technical training and modules through online and instructor led programs. Based upon employee performance evaluations and their respective needs, these courses are added to employee annual development plans:

  **Category Examples**
  - How to Deal With Confrontation
  - Strategic Thinking
  - Presentation Skills
  - Constructive Criticism
  - Micro-Soft Office
  - Tap Root (Incident Analysis)
  - Etc.
Summary - General Training Requirements For QA/QC Inspectors

- Progression series for each function he/she will be inspecting:
  - Gas Mechanic or GFO
  - Customer Metering Services (CMS)
  - I&R (Under development within L&D)
  - Annual Expert Training (AET)
  - OQ covered task qualification for any/all tasks to be inspected
  - Job Shadowing
  - Company required Corporate Safety, Process safety and HR related modules
  - Initial driver safety, along with subsequent refreshers and newly assigned “E” Learning modules
  - Tap Root
  - Etc.
General Discussion…

• What approach does your company take in training and qualifying its QA/QC inspectors?
• Does this approach work well?
• Does your company require inspectors be OQ qualified to the covered tasks they will be inspecting? All covered tasks they will be inspecting or only certain tasks?
• Does your company routinely review and modify QA/QC inspector training programs? If yes, how often?
• Does your company utilize “formal" or “industry recognized” QA/QC training programs? If yes, which programs?
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