Gas QA/QC Approach to Inspector Training

2019 NGA Fall Operations Conference

nationalgrid

Safety Moment

- **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 on-line 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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