

Training & Qualification A Look Into the Future

NGA Contractor Workshop April 4, 2018

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Agenda

- Training
 - Core Skills training
 - Company-specific training
 - On-the-job training / Apprentice programs
- Operator Qualification
 - Addressing company-specific requirements
 - Performance Evaluations
- Contractor Onboarding
- Continuous Improvement



Redefining The Word "Qualified"

- Simply being OQ proficient is no longer an acceptable as the "minimum"
- Qualified now embraces "Competency"
 - Core Skills training
 - Company-specific training
 - On-the-job training / Apprentice programs
 - Process safety management
 - Company culture expectations
 - Demonstrating both Knowledge & Practical Application – The New OQ Model





Training

Major aspects of training:

- Fundamental knowledge, skill and ability to perform a given process including recognizing and reacting to abnormal operating conditions.
- 2. Company-specific knowledge, skill and ability relative to:
 - Equipment O&M;
 - Fitting or component installation instructions;
 - Company specific procedures
- 3. OJT or Apprentice
 Programs to further
 practice and
 refine skills

OJT

Company Specific Training

-Company culture, Equipment, System Components, Work Methods, Materials and Procedures

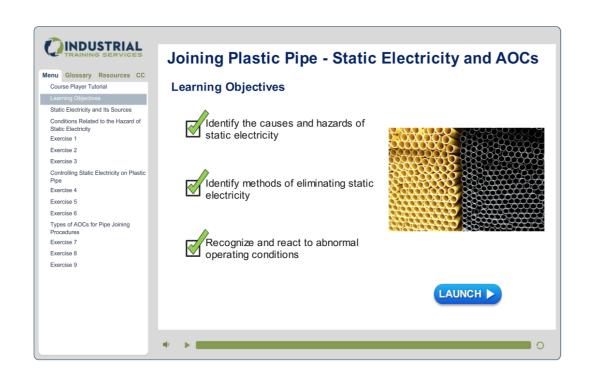
Fundamental Knowledge and Skills for each Process



NGA Training Options

Online Refresher Training:

- 15 -20 minute refresher modules of key aspects of each covered task.
- Available online within the ITS
 OnBoard system. Hardcopies
 may be purchased from ITS.



GTI Field Skills Training Program:

- Instructor-led program with emphasis on fundamental processes
- 77 Modules
- Slide Presentations, Leaders Guides, Participants Guide, Knowledge Checks, Videos, Hands-on Activities
- Aligned with NGA OQ Program
- NGA negotiated a license with GTI on behalf of all OQ participants. Available now via the GTI website.

Natural Gas Field Skills Training

- Turn-key program
- Instructor-led format
 - PowerPoint presentations
 - Leader Guides
 - Participant Guides
 - Videos
 - KnowledgeAssessments
 - Hands-on Activities

77 Modules in 10 Areas

- Overview
- 2. Construction
- 3. Corrosion Control
- 4. Pipeline Installation
- 5. Pipe Joining
- 6. Pipeline O&M
- 7. Pressure Regulation
- 8. Customer Service
- 9. Compressor Station O&M
- 10. Emergency Preparedness







Balancing Field & Classroom Training is Key to Connecting the Dots.....







Intended Use of the Field Skills Program

- GTI Field Skills Training Program is intended to cover the core fundamentals of gas distribution processes in an instructor-led, hands-on environment.
- The Field Skills Training Program is <u>not</u> intended to be the only training resource. This Program needs to be supplemented with training to:
 - ✓ Company operating procedures
 - ✓ Equipment operating procedures
 - ✓ Component / Fitting instructions
- Companies have the ability to integrate components of the Field Skills Training Program with existing training resources and company/equipment specific training.



Hands-On "How To" Exercises MUST be Part of the Curriculum







NGA License to GTI Program

- ➤ NGA has entered into a license agreement with GTI which will provide access to the GTI Field Skills Training Program to all LDCs and contractors who participate in the NGA OQ Program.
- ➤ This action was taken under the direction and unanimous support of the NGA Training & Qualification Committee and the Operating Managing Committee.
- Expand access to this well-established and vetted core skills training program.
- ➤ License allows NGA to direct annual updates/changes. This will be done under the direction of the Training & Qualification Committee.
- ➤ The collective buying power of NGA membership allowed NGA to secure a very affordable price structure, but it does require participation by all companies who utilize the NGA OQ program.



Competency Documentation

- > Documented and auditable:
 - Attendance
 - Agendas
 - Curriculum with time requirements
 - Company-specific requirements
 - Demonstration and Hands-On activities
 - OJT, Apprentice programs
 - Field validation of proper use of tooling/equipment, proper installation of component/fitting
 - "Book of Repetitions"



If it's not documented, it never happened!



Company Specific Qualifications Embracing Operational Ownership

Major aspects of OQ:

- NGA OQ Credential Fundamental knowledge, skill and ability to perform a given process including recognizing and reacting to abnormal operating conditions.
- 2. Knowledge of company-specific requirements:
 - Company-specific procedures or work methods that may exceed or differ from industry standards;
 - Required components and/or equipment;
- 3. Competent Individual qualified to perform specific tasks for a specific Company

Competent Individual

Company-Specific
Qualification
-Equipment, Components,
Work Methods and
Procedures

 NGA Qualification –
 Fundamental Knowledge and Skills for each Process



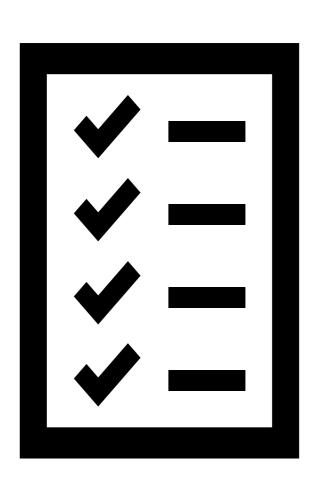
OQ Performance Evaluations

- Regulatory pressure to expand the use of Performance Evaluations to ensure that an individual has the required skill and ability – key enhancement to transition from *Qualified to Competency*
- Quickly becoming a priority of the OQ Committee
- Expansion of Performance Evaluations could have a significant impact on the scope of OQ
- > Considerations:
 - Requalification intervals
 - Qualification methods simulation, in-situ, during training
- Next step develop strategy and criteria around Performance Evaluations and validate approach with regulatory community.



Company Specific Training The Contractor Onboarding Process

- Clearly communicating company-specific requirements for each company defined role.
 - ✓ Company safety culture and customer expectations
 - ✓ Minimum fundamental core skill training requirements
 - ✓ Minimum company-specific training requirements
 - ✓ Company-specific competency demonstration requirements
 - ✓ Task-specific experience requirements
 - ✓ NGA OQ requirements
 - ✓ Company-specific OQ requirements





Transforming a Culture of Continuous Improvement to Continuous Learning

API RP 1173, Pipeline Safety Management Systems, is a recommended practice released by the American Petroleum Institute establishing a pipeline safety management systems (PSMS) framework for organizations that operate hazardous liquids and gas pipelines jurisdictional to the US Department of Transportation.

- > RP1173 establishes a formal process for continuous improvement
 - Use of data from field audits, QA/QC programs, exam results, incidents, etc. to systematically improve training and qualification programs.
 - Use this foundation to embrace a paradigm shift in thinking to transform "qualified to competency"
 - Treat EVERY operational experience as a learning opportunity promoting a positive learning culture



NGA Can Help Facilitate the Shift from *Qualified to Competent*

- Use existing collaboration framework to share inter-company experiences, capitalize on individual experience and develop a recommended practice and core elements necessary to transform "Qualified to Competent"
- ➤ Build on the NGA OQ White Paper Recommendations to enable operational behavior changes leading to longer term sustainable culture changes associated with *continuous learning*
- Establish a consistent recommended practice to Company Specific Contractor Training (aka On-Boarding Process) using GTI Core Skills Program as the foundation.
- Comprehensive review and enhancements to the GTI Core Skills Program to further embrace and support the transition to developing competent vs qualified technicians
- Work with OMC to Move these Initiatives Forward Within a Defined Timeframe and Project Plan / Deliverables



Thank You!

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