

Midwest ENERGY Association



Operator Qualification

2015 South Dakota/North Dakota
Safety Operator Training

Sioux Falls, South Dakota

Midwest ENERGY Association

Since 1905

Serves the people that delivery electricity and natural gas to homes and business. MEA (Midwest ENERGY Association) was founded as a trade association over 100 years ago by distribution utilities, whose vision was to improve safety and efficiency. Today, utility companies around the globe benefit from MEA's industry learning seminars, operations summits, and other events. Members collaborated to develop EnergyU, the world's premier online training and testing system for gas and electric distribution utilities.

We are your **partners in operational excellence.**

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Operator Qualifications

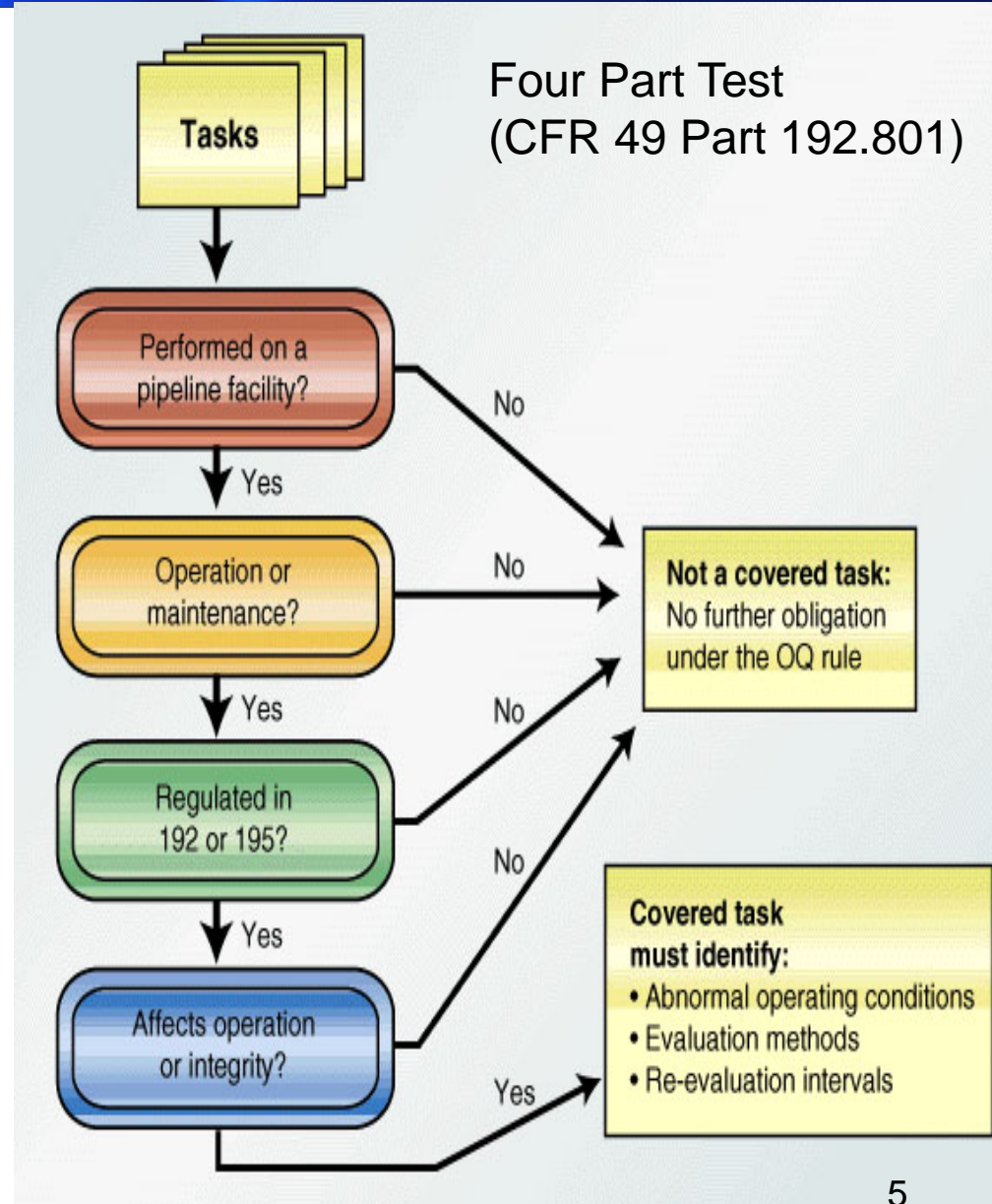
Overview

- Established in 2002
 - Why? Federal response to a series of incidents in the 1990s
- Requires operators of gas pipelines to develop and maintain a written program that documents the following:
 - Covered task list
 - Evaluation processes (initial and re-qualifications)
 - Abnormal Operating Conditions (AOC)
 - Evaluation intervals
 - Incident reviews
 - Loss of qualification, suspensions
 - Communication of Program changes to affected individuals
 - Documentation and record keeping

OQ Covered Task - 4 Part Test

To assure safety in the transport of hazardous gases and liquids in the nation's pipelines, pipeline operators who perform covered tasks must be qualified.

Qualified means that an individual has been **trained and evaluated** to perform assigned covered tasks and recognize and react to abnormal operating conditions.



Training shall be provided to ensure that individuals performing covered tasks have the necessary **knowledge and skills** to perform the task in a manner that ensures the safe operations of the pipeline facilities

Not every individual will need training

- Responsibilities
 - The employer is responsible for providing training
- The program shall identify those responsible for:
 - Determining the need for training
 - Identifying training materials or sources
 - Assuring training is documented



- Requires individuals who operate or maintain pipeline facilities to be trained and qualified to perform their assigned covered tasks
- OQ Rule Definition– Evaluation
 - A process established and documented by the operator to determine an individual's ability to perform a covered task
- Evaluation Methods
 1. Work performance history review
 2. Performance on the job
 3. Simulations
 4. Written examination
 5. Other forms of assessment



Qualified means that an individual has been evaluated and can:

1. Perform assigned covered tasks
2. Recognize and react to abnormal operating conditions



AOC is a condition, identified by the Operator that may indicate a malfunction of a component or a deviation from normal operation that may:

1. Indicate a condition exceeding design limits; or
2. Result in a hazard(s) to persons, property or the environment



- OQ Rule requires operators to maintain records that:
 - Identify the individual
 - Identify the covered tasks
 - Date of current qualification and qualification method used
 - Date when an individual's qualification expires and identify what re-qualification method to be used
- Qualification records must be maintained for five years
- Maintaining good records is *critically important* for an OQ Program



- Ensure a qualified workforce
- Reduce the likelihood of incidents caused by human error

So how are we doing?

Current Trends & Challenges

Trends and Challenges

Measurements/
Metrics

Cyber security

Technology (smart meters, automated metering, clean-coal technology, etc.).

Regulatory Changes/
Regulatory Uncertainty

Volatile oil and gas
prices

Economic concerns

Safety

Aging Infrastructure

Ability to attract key talent

**Renewable energy/
Green energy**

Changing/Aging Workforce

Mature Program

Environment (global warming/climate change,
emissions/carbon requirements, etc.).

Fracking

Govt./Political environment

- Trend
 - Increased regulatory scrutiny
- Background
 - Several recent events in the industry have resulted in damage to people, property or the environment
 - July 2010 – Oil Spill, Marshall, MI (Enbridge)
 - September 2010 – Explosion, San Bruno, CA
 - December 2010 – Explosion, Wayne, MI
 - January 2011 – Explosion, Philadelphia, PA
 - February 2011 – Explosion, Allentown, MI
 - February 2013 – Explosion Royal Oak, MI... Kansas City, MO
 - March 2014 – Explosion, East Harlem, NY
 - March 2015, Explosion, East Village, New York

- Recent events are serving as a catalyst for new regulation and closer regulatory scrutiny within the gas industry
- Acceleration of certain types of work and workers
 - Integrity Management Programs
 - Replacement of high maintenance gas piping with low maintenance plastic and steel
 - Infrastructure recovery programs
- Requirement for more consistency between programs
 - ASME B31Q – National
 - Regulatory Auditors – State, National?
 - Auditors, Inspectors, Credentialed Evaluators
- Greater emphasis on employee's performance in the field with greater application of the suspension process

Generational Attributes

Traditionalist 1900-1945

- Smallest population in the workforce
- Work and home life do not mix
- Trust and hard work

Baby Boomers 1946-1964

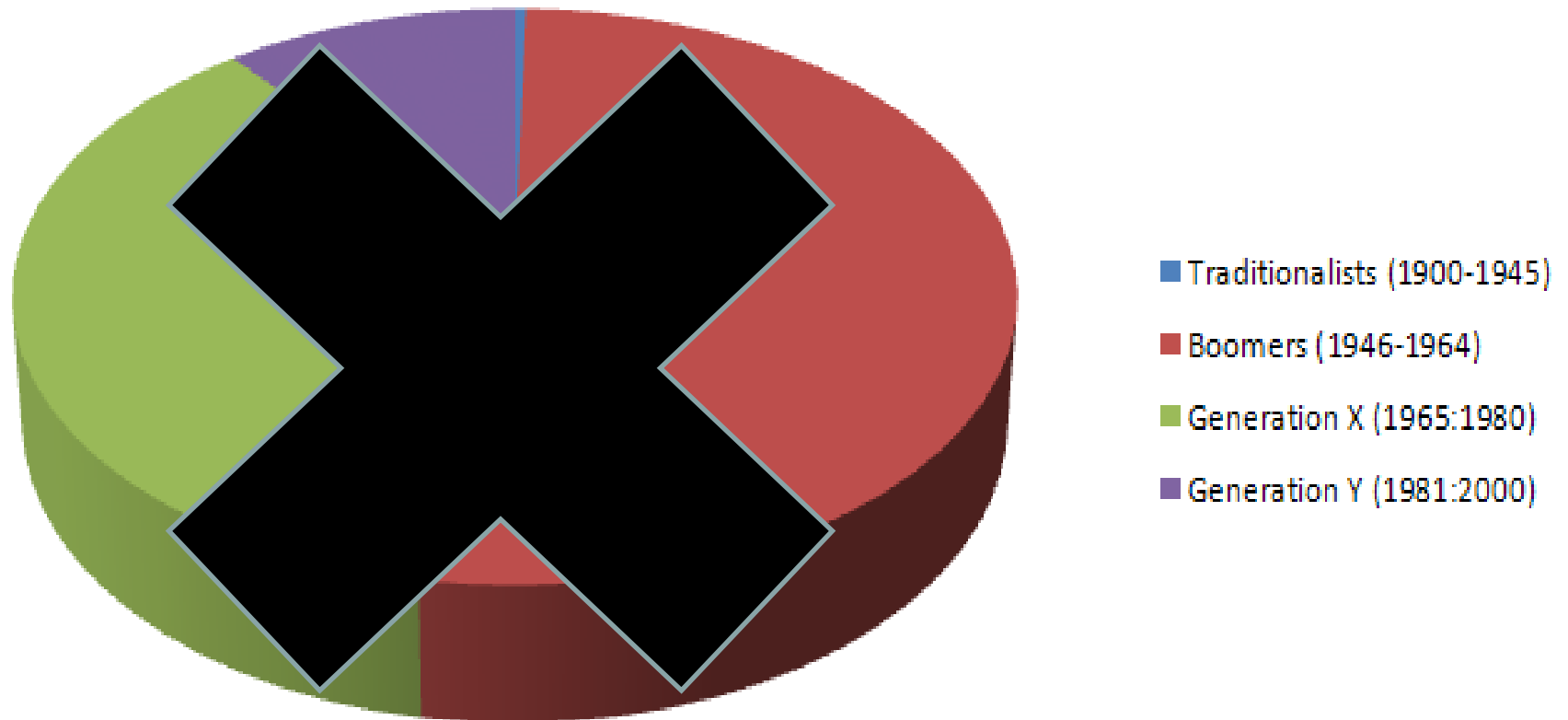
- Loyal and hard working; created “workaholic”
- Job status is important
- Competitive

Generation X 1965-1981

- Were exposed to daycare and divorce
- Individualistic, self-reliant
- Focus on relationships and outcomes
- Well educated

Generation Y 1982-2000

- At ease with diverse work groups
- Optimistic, confident and social
- Multi-tasks as a matter of practice
- Supremely confident in a high-tech world



“The U.S. Census Bureau and Bureau of Labor Statistics both predict that by 2015, baby boomers will cede the majority of the workforce to generation Y. It will be the largest shift in human capital in history.”

Sarah Sladek


- The new generation of students and workers is the “now” generation
 - They are sophisticated and confident with technology
 - They do not want to wait to have their questions answered
- Traditional training and OQ practices will need to be reconsidered
 - New delivery methods (e.g., CBT v. classroom)
 - Adapt a quicker pace that can respond to a mobile work force
- Technology advances and the speed of change makes lifelong learning a must!
- The ushering in of a new workforce creates opportunities to establish new company cultures and norms

The bottom line is, everything we do in the future will involve technology. What we need to do is figure out how to best leverage these tools and use them to help us capture the interest of our students, rather than to compete against these devices for their attention.

PS- And don't forget about the baby boomers!

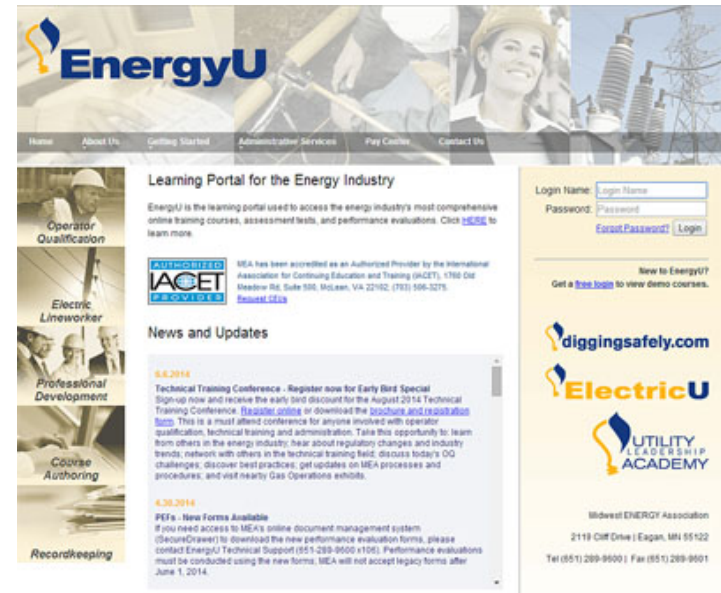
MEA Best Practices

MEA's Support for Your OQ Program

- The Operator Qualification (OQ) RuleThe logo for the Pipeline and Hazardous Materials Safety Administration (PHMSA) features a blue circular icon with a white stylized 'P' to the left of the text "PHMSA" in a bold, blue, sans-serif font. Below "PHMSA" is the text "U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration" in a smaller, blue, sans-serif font.
 - Is a regulatory requirement
 - Requires individuals who operate or maintain pipeline facilities be trained and qualified
- Midwest ENERGY Association (MEA)
 - Assists distribution utilities, transmission companies and pipeline contractors in maintaining a qualified workforce
 - MEA provides online training, testing, performance evaluation criteria and forms

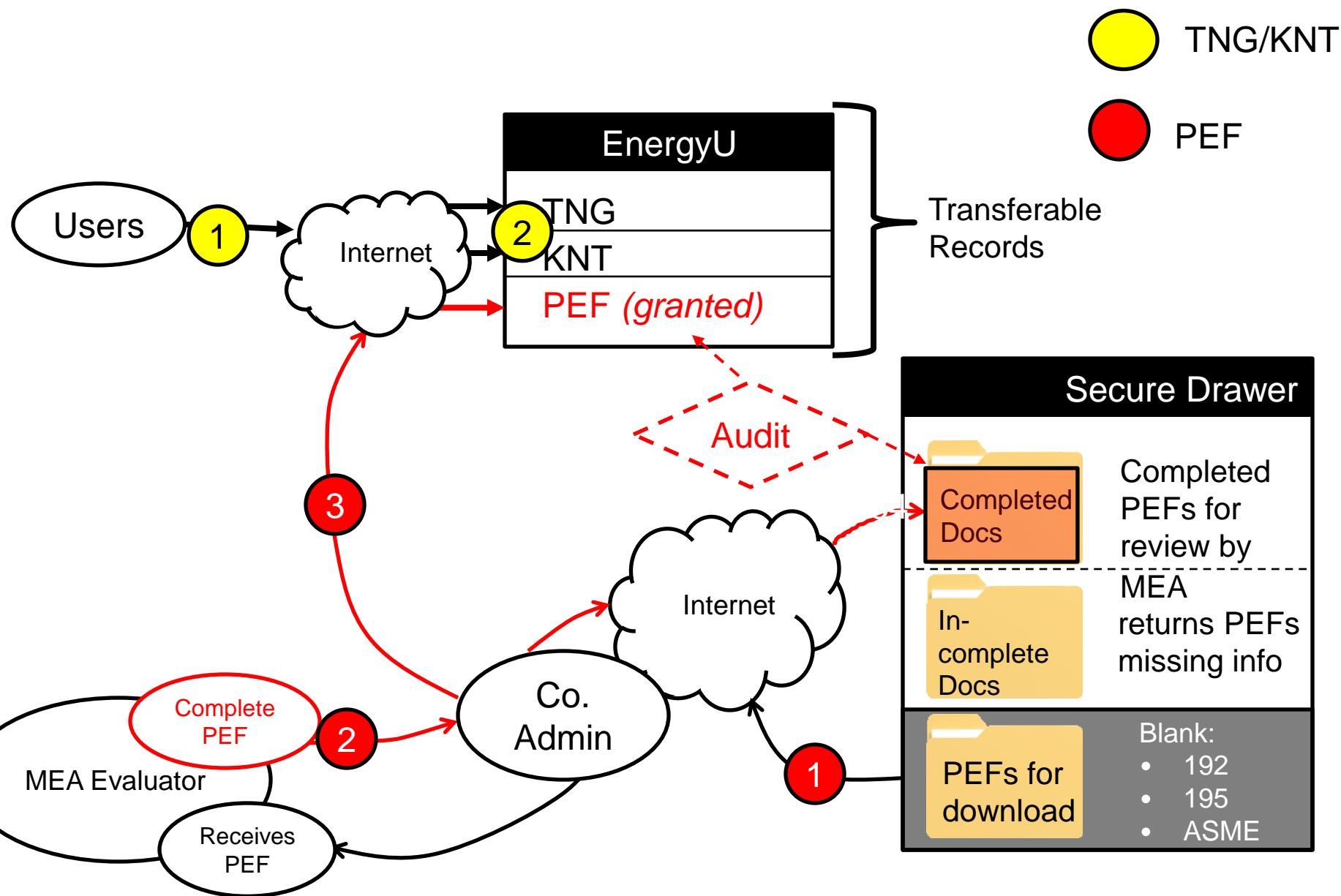
MEA has three course libraries that meet OQ training requirements

- 192 Gas Library
 - Gas Distribution
 - Gas Transmission
- 195 Liquids Library
- ASME B31Q Pipeline Personnel Qualification Library (192 & 195)



- MEA pioneered the early OQ Program
 - Q41 established in 2000 through MEA Member consortium
- MEA Best Practices Program established in 2014
 - Goal: To strengthen the training and evaluation process and to improve online security of the OQ documents
 - Qualification process overview
 - Company joins MEA Best Practice Program and is established in the EnergyU database
 - Company assigns System Administrators and Evaluators
 - Online training and testing
 - Employees complete training (TNG) and knowledge testing (KNT)
 - Performance Evaluations
 - Employee evaluation completed by Qualified Evaluators using PEF document
 - Recordkeeping & Record Transfer
 - Qualification documents to company, as directed
 - ISNetworld interface

Best Practices Overview: Simplified



- Best Practices Program manages your training, testing and storage of your OQ materials and documentation
- Evaluation improvements include:
 - New application process, including resume and minimum experience requirements
 - New evaluator training requirements with a three year re-certification interval
 - Evaluation forms signed by both the evaluator and the individual being evaluated
 - Recorded start and stop times
 - Improved and revised documents
 - Document management system for all performance evaluation forms (PEFs)

- Benefits:
 - Verifiable records
 - Creates a path for portability for both qualified individuals and Credentialed Evaluators
 - Contractor credibility for operators
 - MEA will transfer your records to other sites including ISNetworld®
 - MEA confirms the credibility of your program to others
- Questions?
 - OQ Program-
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Thank You!

Any Questions?