Utility General Education Catalog

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UGE-0101 Utility Basics

MEA Certificate Number **TNG - MEA1533**
KNT - MEA1297

Continuing Education Unit (CEU) **0.1**

Course Description

This course is an introduction to the natural gas and electricity industries.

Objectives

- Identify the benefits and uses of natural gas and electricity, and the process of production to delivery.
- Recognize the characteristics and hazards of natural gas and electricity.
- Determine how natural gas and electricity are harnessed, and how to safely work around them.

UGE-0102 Energy Industry Dynamics

MEA Certificate Number **TNG - MEA1534**
KNT - MEA1299

Continuing Education Unit (CEU) **0.1**

Course Description

This course provides the participant with a management and organization perspective of the energy industry. It is primarily concerned with presenting how energy companies generate revenues, compete in the industry, and serve their customers.

Objectives

- Describe how the energy sources of natural gas and electricity have changed throughout history.
- Identify the steps involved in the energy generation-delivery process.
- Determine how energy companies generate revenues, and the role that billing plays in this process.
- Identify the basic businesses in the energy process and how they have evolved.
- Explain the purpose of ratemaking and why it is important.

UGE-0110 Horizontal Directional Drilling

MEA Certificate Number **TNG - MEA1535**
KNT - MEA1351

Continuing Education Unit (CEU) **0.1**

Course Description

Horizontal directional drilling (HDD) is a trenchless form of excavation that provides an environmentally sensitive and efficient method of installing utilities in areas where conventional trenching isn't feasible or service impact is undesirable. Typical HDD applications include: - Airports - Railroads - Highways - Harbors - Rivers - Wetlands – Preserves

Objectives

- List the advantages of using HDD over other trenchless technologies.
- Describe the HDD process and the applicable work procedures required for the job.
- Identify HDD equipment and the requirements for predrilling preparation.
- Describe general safety procedures in the use of HDD equipment.
- Recognize and react to Abnormal Operating Conditions (AOCs) that may be encountered during the HDD process.

UGE-0115 Preventing Utility Cross Bores

MEA Certificate Number **TNG - MEA11534**
KNT - MEA11535

Continuing Education Unit (CEU) **0.1**

Course Description

Utility cross bores are considered hazards in waiting and a nuisance to society. News headlines tell us all too often how dangerous utility cross bores are. Natural gas explosions, electrocutions, power outages, and damaged communication lines are all hazardous disasters resulting from sewer contractors clearing out unknown cross bored sewer lines. So, what can be done to prevent utility cross bores from happening and to avoid such hazardous threats to our society? Review the course for some answers to this troubling question.

Objectives

- Identify utility cross bores and the threat for certain hazardous events.
- Understand industry concerns for trenchless pipeline installation procedures.
- Locate useful resources in the prevention of utility cross bores.
- Recognize practices and procedures that mitigate and prevent utility cross bores.
- Perform cross bore prevention best practices.

UGE-0200 Customer Contact

MEA Certificate Number **TNG - MEA1543**
KNT - MEA1542

Continuing Education Unit (CEU) **0.1**

Course Description

It may be hard to measure exactly how much customer relations affect a company's bottom line, but good customer relations can make all the difference in the world. Good relations start with good customer service. This course focuses on communication skills, appearance, and conflict resolution, and it takes a look at different ways to increase customer satisfaction every time you come into contact with a customer.

Objectives

- Explain the importance of good customer service.
- List the characteristics of a professional appearance.
- Identify importance aspects of the service order.
- Describe how to properly handle appointments.
- Identify good and bad communication styles.
- Explain the best way to deal with unhappy customers.
- Describe steps to ensure customer satisfaction.

UGE-0301 Conducting Effective Tailgating Sessions

MEA Certificate Number **TNG - MEA1537**
KNT - MEA1536

Continuing Education Unit (CEU) **0.1**

Course Description

Working safely should be the expectation of every Leadman and crew member. Holding Tailgate meetings and using the TAILGATE meeting form is one of the "tools" the Leadman and crew members can use.

Objectives

- Define and explain the importance of an effective Tailgate meeting.
- Identify the items that should be discussed at a Tailgate meeting.
- Describe the components needed to complete a Tailgate form.
- Determine how to evaluate Tailgate meetings.

UGE-0401 Excavation Safety

MEA Certificate Number **TNG - MEA1541**
KNT - MEA1540

Continuing Education Unit (CEU) **0.1**

Course Description

Digging is dangerous. Damage to underground facilities resulting in loss of natural gas, telephone, water or electricity can leave communities without such services as police, fire and medical protection. When damaged, these services can endanger life, property and public safety. In addition, it is estimated that each year there are over one hundred fatalities associated with excavation and trenching operations. Fatalities are not only experienced

by workers on large constructions sites—a homeowner installing a fence or working on a landscaping project is also in danger.

Objectives

- Identify the applicable procedures to be followed to prevent excavation damages to underground utilities.
- Determine and demonstrate the required excavation procedures for the prevention of utility outages.
- Recognize hazards at the excavation site and determine the appropriate safety equipment and procedures to protect yourself and the public from harm.

UGE-0501 Protection of our Wetlands Environment

MEA Certificate Number **TNG - MEA1539**
KNT - MEA1538

Continuing Education Unit (CEU) **0.1**

Course Description

This course discusses regulations, regulatory agencies, and issues relative to the protection of wetlands and waterways.

Objectives

- Define the characteristics of a protected wetland or waterway.
- Determine which wetlands and waterways are protected.
- Recognize which regulatory agencies manage and regulate water resources.
- Describe precautions that must be taken to protect a wetland or waterway during any type of construction activity.
- Identify accepted waterway protection practices.

UGE-0601 CRM Fatigue Awareness and Mitigation for Controllers

MEA Certificate Number **TNG - MEA11655**
KNT - MEA11654

Continuing Education Unit (CEU) **0.1**

Course Description

PHMSA has published their final rule in the Control Room Management/Human Factors regulations. The rule includes procedures for fatigue mitigation, education, and training. There are many factors that induce fatigue in control room operators such as; work schedules, daily body rhythms, certain foods and drinks, sleep environments, sleep disorders, lifestyle outside of work, etc. This course will assist you in recognizing these factors and how to mitigate them.

Objectives

- Recognize shift-work fatigue.

- Identify the effects of shift-work fatigue.
- Apply good practices for mitigating fatigue.

UGE-0611 CRM Fatigue Awareness and Mitigation: Management Strategies

MEA Certificate Number **TNG - MEA11653**
KNT - MEA11652

Continuing Education Unit (CEU) **0.1**

Course Description

PHMSA has published their final rule in the Control Room Management/Human Factors regulations. The rule includes procedures for fatigue mitigation, education, and training. There are many factors that induce fatigue in control room operators such as; work schedules, daily body rhythms, certain foods and drinks, sleep environments, sleep disorders, lifestyle outside of work, etc. This course will assist control room supervisors and/or management in recognizing these factors, how to assess the level of controller fatigue and determine appropriate control measures, as well as provide them with tools to help controllers manage and mitigate fatigue.

Objectives

- Recognize shift-work fatigue.
- Identify its effects.
- Apply good fatigue management and mitigation practices.

UGE-11900 Railroads Right-of-Way Worker Safety

MEA Certificate Number **TNG - MEA11336**
KNT - MEA11337

Continuing Education Unit (CEU) **0.1**

Course Description

Occasionally, workers are required to work on or near a railroad right-of-way (ROW). To keep yourself and your co-workers safe, you need to understand rail hazards and follow safety procedures when performing ROW work.

Objectives

- Define the terms and special employee roles related to railroad ROW work.
- Procedures for working on or near a railroad ROW.
- Safety precautions required for railroad ROW work.
- Recognizing and reacting to emergency situations.

UGE-2301 Combustion and Ventilation Air

MEA Certificate Number **TNG - MEA11323**
KNT - MEA11324

Continuing Education Unit (CEU) **0.1**

Course Description

This course provides information about gas and air mixtures, and combustion and ventilation air. This is important because appliances that are not ventilated adequately can kill. To protect the public, you must understand the need for adequate ventilation and combustion air.

Objectives

- Define the basic terms related to combustion air.
- Identify the differences between complete and incomplete combustion.
- List the problems that could occur from incomplete combustion.
- Identify the causes of carbon monoxide (CO).
- Listing the requirements of adequate combustion air.

UGE-2311 Pilot Lights

MEA Certificate Number **TNG - MEA11325**
KNT - MEA11326

Continuing Education Unit (CEU) **0.1**

Course Description

This course discusses pilot lights and electronic ignitions systems, and describes inspection procedures for both.

Objectives

- Identify the difference between non-automatic pilots, automatic pilots, and electronic ignition systems.
- Identify the three types of automatic pilot burners.
- Identify the three types of flame sensors for automatic pilots.
- List the two types of electronic ignition systems.
- Testing an automatic pilot ignition to verify that it is operating correctly.
- Testing an electronic ignition system to verify that it is operating correctly.

UGE-2312 Gas-Air Adjustment

MEA Certificate Number **TNG – MEA11327**
KNT - MEA11328

Continuing Education Unit (CEU) **0.1**

Course Description

This course discusses gas-air adjustments.

Objectives.

- Identify the components of a typical gas burner.
- Describe the factors that affect the characteristics of a flame.
- Recognize burner problems caused by improper gas-air adjustment.
- How to correct burner problems caused by improper gas-air adjustment.

UGE-2313 Venting

MEA Certificate Number **TNG - MEA11329**
KNT - MEA11330

Continuing Education Unit (CEU) **0.1**

Course Description

This course discusses venting.

Objectives

- Four purposes of venting.
- Six factors that affect venting system design and operation.
- Recognize different types of vents and their use.
- Proper installation of vents and vent connectors, in accordance with applicable code requirements.
- Proper procedure for a vent check.

UGE-2321 Pressure Check to Establish Gas Service

MEA Certificate Number **TNG - MEA11331**
KNT - MEA11332

Continuing Education Unit (CEU) **0.1**

Course Description

This course introduces the topic of gas delivery pressure, and explains how to use pressure testing equipment to ensure that we establish residential service at the correct pressure.

Objectives

- Describe the possible causes and results of over or under pressurization.
- Identify the most common instruments used to measure gas pressure at the inlet riser, and describe the advantages and drawbacks of each.
- Explain the use of company specific pressure measurement instruments to check inlet pressure when establishing gas.

UGE-2322 Establishing and Disconnection Gas

MEA Certificate Numbers **TNG - MEA11333**
KNT - MEA11334

Continuing Education Unit (CEU) **0.1**

Course Description

This course provides an introduction to establishing and disconnecting residential service.

Objectives

- Identify the verification requirements for establishment or disconnection of gas service.
- How to perform the required checks necessary for the safe establishment or disconnection of gas.
- Describe the purpose of a shut-in test.
- Recognize the conditions when a shut-in test would be required.
- Explain how to determine the amount of gas flowing through a meter while conducting a shut in test.
- Determine how to light up or shut off gas.
- Describe the procedures involved in establishing or disconnecting gas.