

# First Responder Utility Safety Training Program

e-Learning Program for First Responders:  
[firstresponder.ngridsafety.com](http://firstresponder.ngridsafety.com)



**nationalgrid**



## Smell Gas. Act Fast.

To report emergencies, call **911** and **National Grid** immediately.

In case of gas emergencies:

**Massachusetts**

**1-800-233-5325** and **911**

**Rhode Island**

**1-800-640-1595** and **911**

**New York**

**Long Island and the Rockaways:**

**1-800-490-0045** and **911**

**Metro NY: 911** and **1-718-643-4050**

**Upstate NY: 1-800-892-2345** and **911**

In case of electric emergencies:

**New England**

**1-800-465-1212** and **911**

**Upstate New York**

**1-800-867-5222** and **911**

## Our commitment

As first responders, you face many challenges and put yourselves on the line every day to protect lives and property. You are the main defense between utility-related hazards and the public. It was with appreciation and respect for all you do that we conceived of our First Responder Utility Safety Training. Simply stated, we are committed to helping you ensure the safety of our customers and communities.

## Designed with first responders, for first responders

Our free training program was designed in cooperation with fire chiefs, safety trainers, educational experts and instructional design professionals. An advisory panel of chiefs and safety trainers throughout the Northeast has helped us understand your unique needs so we can continually improve our safety training program.

## Train to safely respond to utility hazards and more

National Grid's First Responder Utility Safety Training is a comprehensive curriculum that's dynamic, easy to use and effective. Benefits include:

- free utility safety training with no restrictions
- self-paced coursework that accommodates busy schedules
- professional development to satisfy your in-service training requirements
- certificates of completion for your training files.

## Discover user-friendly features for optimal training

The program's e-learning environment offers simple, straightforward navigation and helpful tools that enhance the learning experience.

- Easy-to-use navigation
- Visual aids to improve understanding
- Interactive important terms – just click to see definitions
- Knowledge checks
- User notes
- Supplemental resources.

## Register and complete your online training today

To register, simply visit [firstresponder.ngridsafety.com](http://firstresponder.ngridsafety.com) and complete the registration form. Once you create your user ID and password, you'll be granted access to the e-learning modules and resources. Then you will be ready to begin your utility safety training.

## IMPORTANT TERMS AND CONDITIONS – PLEASE READ

*DISCLAIMER: National Grid is an electricity and natural gas delivery company serving customers in New York, Massachusetts and Rhode Island. This resource was developed solely for first responders in the National Grid service territory who support the communities served by National Grid. Accordingly, the information contained herein is intended for those first responders only. Although information and procedures contained herein may be applicable to your organization, some information and procedures may differ. If you are viewing this resource and you are from outside the National Grid service territory, we strongly recommend that you consult with your local energy provider as well as all local rules, regulations, procedures and protocols before applying this training or any portion thereof to your geographic area.*

*PLEASE SEE OUR TERMS AND CONDITIONS. The Terms and Conditions ("Terms") govern your use of this resource. Please read the terms in full before using this resource. By accepting these Terms, or by using this resource, you agree to be legally bound by these Terms. If you do not agree to these terms, please do not use this resource. We reserve the right to modify these Terms at any time without prior notice, and your use of this resource binds you to the changes made. We do occasionally update these terms so please refer to them in the future.*

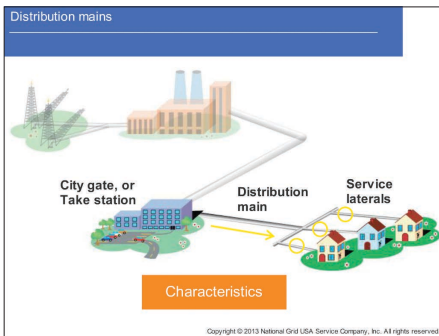


# First Responder Utility Safety Training Program

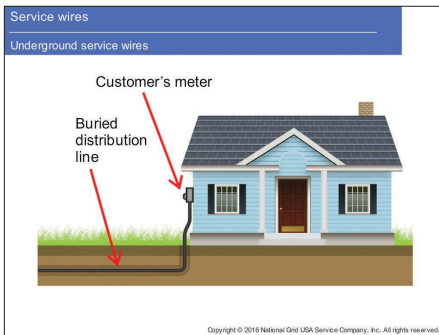


*“This program represents a strong commitment by National Grid to provide critical information to first responders. The website is an interactive resource that equips first responders with electric and natural gas safety information that can make a real difference on the incident scene.”*

– Brian P. Duggan, Veteran commander,  
Northampton and Northborough Fire Departments,  
Massachusetts



## Natural gas safety module 1: Gas distribution system



## Electrical safety module 2: Electrical distribution system

## Overview

Whether natural gas or electricity are the source of an emergency or a contributing factor, it's critical to know basic facility characteristics as well as specific response tactics so that you can safely manage incidents – protecting yourself, your team and the public.

Our program consists of two courses of study: 1) Natural Gas Safety Certification and 2) Electrical Safety Training Certification. Each program was designed to have multiple modules that are self-directed, interactive and instructive for safely identifying and responding to incidents.

## Start with the basics

Within the first two modules of each course, you will learn the basic properties, characteristics and behaviors of natural gas and electricity; the equipment used to transport these energy sources; and the general precautions associated with electric and gas facilities.

**Keep yourself, your team and the public safe. Register and complete**



## Learn response tactics

The next two modules of each course provide response tactics for the most common utility-related incidents. In the gas course, you'll learn how to respond to carbon monoxide events and natural gas leaks, fires and explosions. The electric course covers response tactics for downed power lines and fires involving transmission and distribution lines, substations and underground vaults.

**Objectives**

This module explains carbon monoxide poisoning, and how to:

- Recognize it
- Respond to it
- Prevent it

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### Natural gas safety module 3: Carbon monoxide poisoning

**Substation Fires**

If you must extinguish the fire

1. Position emergency vehicles at least 30 feet from power lines.
2. Use nonconductive ladders.
3. Carry ladders parallel to the ground.
4. Never enter a substation until equipment has been de-energized.
5. Never use a solid stream of water on oil – always use a fog stream.
6. Report all oil releases.

Hover over to revisit rule **30/30/100 Rule**

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### Electrical safety module 3: Fires involving electrical facilities

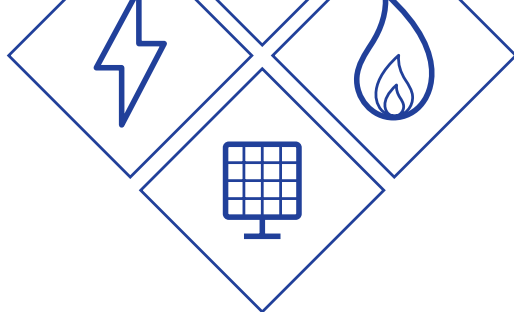
**Downed power line precautions**

- Downed lines can be energized and may create step potential.
- Contact National Grid immediately, and take these precautions.

- Approach cautiously.
- Park a safe distance away.
- Beware of coil memory.
- Secure the area.
- Take fence precautions.

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### Electrical safety module 4: Downed power lines



## Specialized training

The final three modules of each course focus on some specialized gas and electric utility-related hazards.

In the gas course, you'll learn how to handle excavation-related damages to gas pipelines and incidents involving coal tar pipe wrap, gas odorant spills, gas pipeline liquids and manholes. The gas course also covers liquefied natural gas (LNG) facilities and LNG transport trailers.

Specialized training in the electric course covers PV solar technology and response tactics for incidents involving these systems.



Incident response

What not to do

- 1 Do not enter the LNG vapor cloud or come into contact with the liquid.
- 2 Do not direct water onto LNG tanks in the absence of direct flame impingement.
- 3 Do not utilize foam other than high expansion foam on an LNG spill.
- 4 Do not allow the runoff from hose streams to mix with LNG.
- 5 Do not close control valves unless you consult with National Grid.

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## Natural gas safety module 6: Liquefied natural gas

*“National Grid’s utility safety e-learning program is engaging and accessible and the perfect length for first responders. The solar safety curriculum is especially valuable and needed in every community, as more solar power systems are being installed every day.”*

– Chief James G. McLaughlin,  
Warwick Fire Department,  
Rhode Island

Size up the hazard

Labels and signage

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## Electrical safety module 7: PV solar system incident response tactics

**Keep yourself, your team and the public safe. Register and complete**



*“The group training exercises featured on National Grid’s Utility Safety website are a handy, effective training tool – I wouldn’t change anything about them. They address some of the most common gas safety issues seen by the fire service, with clear operational guidance for responders. It’s great that they can be printed and used offline as well as on the computer.”*

– Safety Officer David Juron, Westmere Fire Department, New York

## Natural gas group training exercises

Research with our advisory panel members revealed a need for training exercises that can be used in a group setting, away from the computer. Learning utility incident response tactics as a group enhances safety by ensuring consistency among the entire team.

Group training exercises cover the four most common natural gas-related fire service calls with real-world scenarios and Q&A learning practices. The training exercises are downloadable from the website at [firstresponder.ngridsafety.com](http://firstresponder.ngridsafety.com) and can be printed and used by training officers for personal use, in training seminars and as a supplement to the e-learning certification program.

**Questions as your crew arrives on the incident scene**

1. Based on the image above, what is your size up of this situation?  
Based on the image above, a moderate pressure gas leak has been suspected.

2. What should you NOT do as you address the situation?  
There are several things that you must not do when a natural gas leak is suspected. Second, never operate underground open any type of gas valve that has never been tested.

3. What are your initial response tactics, what NOT to do and what to take prior to the arrival of the fire?  
Following initial evaluation of the leak, proceed at a safe distance of 100 feet from the leak. Do not use zone if buildings are involved; park downwind and secure traffic; if necessary, use other type of response tactics. What NOT to do is to use zone if buildings are involved; park downwind and secure traffic; if necessary, use other type of response tactics. What NOT to do is to use zone if buildings are involved; park downwind and secure traffic; if necessary, use other type of response tactics.

4. How do you ensure the safety of the incident scene?  
All personnel entering the hot zone must wear full protective equipment (PPE) and SCBA. Do not use zone if buildings are involved; park downwind and secure traffic; if necessary, use other type of response tactics. What NOT to do is to use zone if buildings are involved; park downwind and secure traffic; if necessary, use other type of response tactics.

**National Grid Group Training Exercise #4**

This training reflects industry best practices but does not replace your organization's SOPs/OSDs. This material can be utilized to provide a perspective on how to respond to emergency operations and can be collaboratively incorporated into your operating procedures as they are updated.

**Carbon Monoxide Poisoning**

Residents overcome by carbon monoxide poisoning. An ambulance crew has been dispatched to 4500 South Street, where a 40-year-old male is feeling ill with flu-like symptoms after arrival, the ambulance crew calls the dispatch center for carbon monoxide (CO) alarm and a police officer has gone into the home and a police officer has gone into the home and a police officer has gone into the home.

**Training Officer:** Print pages 4 and 5 and hand them out to all participants so they can follow along for the discussion.

**National Grid Group Training Exercise #1**

This training reflects industry best practices but does not replace your organization's SOPs/OSDs. This material can be utilized to provide a perspective on how to respond to emergency operations and can be collaboratively incorporated into your operating procedures as they are updated.

**Gas Leaks**

Gas main leak with no ignition. A contractor installed a water main at 5 South Street and ruptured a gas line during the excavation. The contractor closed 911 and closed 100 feet around the leak. Current weather is clear with a 15-mile-per-hour wind to the east. Your engine company and crew have been assigned to the incident. Your call will be the first to arrive on the incident scene. As you initiate your response, your dispatch center reports receiving several 911 calls from nearby residents indicating a smell of gas in the area.

The area involved is a residential neighborhood and several residents are reporting that the smell of gas has entered their homes. Mrs. Novitski, who lives at 15 South Street, calls 911 and reports the strong odor of gas in her basement.

As a crew, please work together to address the following response-related questions. Upon arrival, you encounter the situation displayed in the photo.

**Training Officer:** Print pages 4 and 5 and hand them out to all participants so they can follow along for the discussion.

**Initial response questions to consider**

1. What instructions should be given to the callers who smell gas in the street?  
The dispatcher should advise callers who call smell gas to evacuate their residences and the affected area (if that zone). They should be asked to report to the first arriving fire officer for additional evaluation instructions.

Please see Module 4, 4.1, covering on the scene. Evacuate occupants.

2. During response, how do you prepare yourself and your crew for the situation?  
As your crew moves toward the incident scene, updates on the situation should be shared with all crew members and the officer should assign personnel to tasks that they are anticipating.

Please see Module 4, Universal response tactics, Arriving on the scene. Parking, lives (and property) are at stake.

3. How do you confirm that National Grid or the local natural gas utility has been notified of this event?  
Upon arrival, the confirmation that National Grid or the local natural gas utility has been advised of the situation and is responding should be verified through the dispatch center after your "have-ghost" your on-scene report.

Please see Module 4, When to call, Arriving on the scene.

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**Keep yourself, your team and the public safe.  
Register and complete your online training today.**

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