

nationalgrid

# Building a safer tomorrow

Pipeline Safety Framework



## Our gas business and commitment to safety

At National Grid, safety is our utmost priority. Our unwavering commitment to your safety is at the heart of every aspect of our operations, from our dedicated team members to our rigorous processes and actions. Our extensive natural gas pipeline network spans over 11,000 miles, serving the communities of Massachusetts and New York with safe and reliable natural gas.

We adhere to a strong safety culture defined by API RP 1173, which encompasses shared attitudes, values, norms, beliefs and practices among our employees and contractors. This culture is evident in how we conduct ourselves daily:

- Embracing safety: Personal, public and asset safety are paramount to us.
- Setting high standards: We constantly aim to exceed safety standards.
- Speaking up: If we see something unsafe, we say something.
- Personal responsibility: We each take personal responsibility for safety.

Our core values serve as our guiding principles, influencing our decisions, behavior and interactions with colleagues and customers. These values define our company, and the way others perceive us. They are simple yet powerful:

- Do the right thing: We always make the right choices.
- Find a better way: We continuously seek improvements.
- Make it happen: We take action to achieve our goals.

These values, combined with our strong safety culture, ensure that safety remains at the forefront of everything we do.

Together, we will explore the vital topic of pipeline safety, navigate our Safety Management System and examine the ten key elements that steer our efforts. These elements work in harmony to build a safer future for you and your loved ones.

## Our vision

Our vision is clear – we aim to create a clean, fair and affordable energy future. This future benefits you by empowering young energy problem-solvers, helping you use energy efficiently and fighting climate change to ensure a healthier community.



## A letter from Ross Turrini and Richard Delaney

An integral part of our culture at National Grid is set by our values: Do the Right Thing and Find a Better Way. So, in early 2017, National Grid did the right thing by voluntarily taking the proactive step to adopt the industry leading standards set by the American Petroleum Institute (API RP 1173). Through these standards, which provide a disciplined, formalized approach to managing pipeline safety, we have found a better way to build upon our already strong, local and empowered safety culture.

By adopting these standards, which demand a risk-based approach to managing our assets and operations, we self-imposed a rigorous guide for how we inspect, evaluate and invest in our system and people. In line with our values, we seek to identify our own opportunities for improvement – continuously finding a better way – and share our findings both internally and externally to ensure the safety of our system and operations.

Rather than use a one-size-fits-all approach, API RP 1173 provides a framework by which each risk can be appropriately assessed, and specific mitigation plans developed. The implementation of this industry standard builds on conformance with National Grid's established pipeline safety management programs and local, state and federal codes and standards. It integrates them into a single, umbrella framework providing a disciplined and formal method to manage pipeline safety risks and compliance issues.

And, the benefit to customers is clear: by putting our relentless commitment to improve pipeline safety into formal practice, we will have a gas system that is not only reliable, but constantly improving to be safer than ever.

Ross Turrini  
National Grid  
COO, New York Gas

Richard Delaney  
National Grid  
VP, Gas Compliance



*Ross Turrini*



*Richard Delaney*

# What is pipeline safety?

Pipeline safety means keeping you, your home and our environment safe. We want to make sure that the natural gas we provide to your home is delivered safely and without any problems.

Here's how it affects you:

- 1. Your safety:** We work hard to ensure that the pipelines carrying natural gas to your home are in excellent shape. This means fewer chances of gas leaks or other issues that could harm you and your family.
- 2. Your home:** A safe pipeline system means that your appliances, like stoves and heaters, work properly. You can enjoy a warm home and cook your meals safely.
- 3. The environment:** By keeping our pipelines safe, we also protect the environment. We prevent gas leaks that can harm the air and the places where we live.

## The American Petroleum Institute's Safety Management System

In 2017, we adopted the safety standards set by the American Petroleum Institute (API RP 1173) to create a single, comprehensive framework for managing pipeline safety risks and compliance issues. The API's recommended practice 1173 was developed by pipeline experts for pipeline operators of all sizes. It helps us understand, manage and continuously improve our safety efforts.

## What is a Pipeline Safety Management System?

A Pipeline Safety Management System (PSMS) is a set of rules, policies and procedures that an organization uses to manage safety comprehensively. It helps us continually improve safety. API's RP 1173 is an example of such a system.

Our Safety Management System Framework consists of ten essential components that work together smoothly. These components help us manage safety across National Grid. They include tasks, duties, and specific programs, processes and policies. We follow a Plan-Do-Check-Act cycle to create effective safety plans that keep improving over time.



# The ten elements

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## Leadership Management Commitment (LMC)

This element is about turning our commitment to improving pipeline safety into action. Our leaders set goals and provide resources to make safety a priority. They lead by example and support safety at all levels of our organization.

Leadership/management takes the lead in demonstrating commitment to the safety management system by:

- **Creating a safe culture**
- **Managing risks effectively**
- **Teamwork**
- **Safety involves everyone**
- **Providing resources**



## Stakeholder Engagement (SE)

We build strong relationships with our staff, customers, regulators and communities to enhance pipeline safety. By involving all stakeholders, we can better identify and manage risks.

For our community:

- We are committed to open communication with our customers and communities about pipeline safety and our operations. Our personnel are available to answer questions and share information.
- We actively engage in proactive discussions about pipeline safety with external stakeholders, including regulators, communities and first responders. We believe in sharing valuable lessons learned to enhance safety.
- Our Public Awareness Programs include initiatives such as damage prevention, school education outreach and joint drills with first responders and public officials. These programs focus on engaging with the community and exchanging important information.



## Risk Management (RM)

We identify, evaluate and prioritize potential risks linked to our assets and operations. This helps us create a culture that values recognizing and addressing risks.

An operational Risk Management system has been implemented to oversee assets and projects, comprising the subsequent components:

- Risk identification, assessment and control are integrated into our daily work processes. They are essential parts of our decision-making and help us in achieving our business goals.



## Operational Controls (OC)

Operational controls are important for maintaining our pipeline systems, facilities and equipment according to standards. We follow strict procedures to ensure safety.

The operational control systems element encompasses:

- Instituting integrity programs to ensure regular and thorough inspection and maintenance of equipment and assets.



## Incident Investigation, Evaluation, Lessons Learned (IELL)

We investigate and learn from incidents and near misses. This helps us continuously improve safety and prevent future issues.

Our employees understand the importance of using investigations and shared learning to drive pipeline safety improvements, reflecting our ingrained culture of consistently enhancing safety standards.

National Grid upholds incident management and investigation protocols that encircle:

- Effective communication of the insights gained and lessons learned from these incidents.



## Safety Assurance (SA)

We investigate and learn from incidents and near misses. This helps us continuously improve safety and prevent future issues. The Plan, Do, Check, Act (PDCA) cycle is a key component of our continuous improvement process. By planning, executing, monitoring and adjusting our actions, we can ensure that we are constantly improving our safety measures and overall performance. The PDCA cycle allows us to identify areas for improvement, test changes and implement solutions that are effective and sustainable.

The safety assurance process encompasses:

- **Regular checks**
- **Emergency preparedness**
- **Learning from experience**
- **Regulatory compliance**
- **Meticulous records**
- **Employee training**
- **Management reviews**
- **Your voice matters**





## Management Review and Continuous Improvement (MRCI)

We regularly review our safety performance and make improvements based on our findings. This helps us become even safer over time.



## Emergency Preparedness and Response

National Grid's Emergency Preparedness and Response (EPR) Plan is designed to quickly and effectively bring in trained people and the resources needed during emergencies. This plan aims to protect the safety of customers, communities, employees, contractors, emergency responders and other agencies that might be impacted by an unexpected emergency incident.

Our preparedness directly benefits you in the following ways:

- Quick response
- Ensuring your safety
- Effective communication
- Keeping plans up to date

*But here's how you can play a part too:*

**Helping us help you:** You can make a difference by participating in our free training for emergency responders and 911 dispatchers. Your knowledge could be invaluable in times of crisis. Visit [nasfm-training.org/pipeline](https://nasfm-training.org/pipeline) to learn more.

**Community involvement:** If you're a community first responder, we have a Field Emergency Response Plan designed just for you. It provides essential information to improve situational awareness during emergencies. Explore it at [firstresponder.ngridsafety.com](https://firstresponder.ngridsafety.com).

**Stay informed:** For enhanced situational awareness, there's an app available for community first responders. It's designed to keep you informed about the latest developments during emergencies. Check it out at [Ngrid.iRestore.mobi](https://Ngrid.iRestore.mobi).



## Competence, Awareness and Training (CAT)

In our pursuit of safety, it's essential for personnel to exhibit a strong level of skill and professionalism while carrying out their designated tasks. We provide training to ensure our employees and contractors are skilled and knowledgeable about safety.



## Documentation and Record Keeping (DRK)

Effective documentation and record keeping are essential to ensuring the highest pipeline safety standards. Examples of these records include Operating and Maintenance Manuals, Inspection and Test Records, Emergency Response Plans and Public Awareness Programs.

These records are vital to you because they guarantee transparency, accountability and informed decisions about our pipeline operations. Our commitment to safety not only protects your well-being but also the environment and the concerns of all those impacted by or interested in our pipelines. Your safety and satisfaction remain our top priorities.



## How do we keep our pipelines safe?

Our pipelines are made of steel, plastic and cast iron and buried underground. To operate them safely, we use various methods such as cleaning, corrosion prevention and testing. We also perform regular checks and have plans in place to respond to emergencies. If you see anything unusual or have concerns, please let us know.

We don't do this alone. National Grid works in partnership with organizations like the American Petroleum Institute, Northeast Gas Association and the American Gas Association to improve pipeline safety and service. To learn more about our partnerships, please visit:

**American Petroleum Institute** | [api.org](http://api.org)

**Northeast Gas Association** | [northeastgas.org](http://northeastgas.org)

**American Gas Association** | [aga.org](http://aga.org)





Massachusetts

**Dig Safe®** | [DigSafe.com](https://www.DigSafe.com)

811 or 1-888-DIG-SAFE (344-7233)



Downstate New York

**New York 811** | [NewYork-811.com](https://www.NewYork-811.com)

811 or 1-888-272-4480



Upstate New York

**UDig NY** | [UDigNY.org](https://www.UDigNY.org)

811 or 1-800-962-7962



Know what's below.  
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# nationalgrid

## We're here for you

Your safety matters to us. If you have questions or concerns, please reach out to us. We're here to serve you.

Visit our website: [nationalgridus.com](https://nationalgridus.com)



**Smell Gas. Act Fast. Be the one to call 911.**  
**In a gas emergency, call 911 and National Grid**  
**24 hours a day, 7 days a week.**

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

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### **New York**

Long Island and the Rockaways: 911 and 1-800-490-0045

Metro New York: 911 and 1-718-643-4050

Upstate New York: 911 and 1-800-892-2345