

A Committed Industry – The Initiatives

The natural gas industry has pooled its knowledge and resources to construct and implement effective measures to minimize the impact of acts of terrorism on its facilities and the reliability of service to its customers. The industry has reached out to other energy sectors and companies as committed as it is to working together to coordinate its responses and achieve seamless security. Many cross-industry partnerships have emerged from the attacks of September 11. For natural gas utilities, some of the leading partnerships include:

AGA Natural Gas Security Committee

In existence since the Gulf War, this group has focused on developing industry guidelines and sharing security best practices and is actively involved in developing general guidelines for utility response measures for different government threat advisory levels.

AGA Committee on Security, Integrity and Reliability

Composed of natural gas utility CEOs and senior vice presidents, this AGA Board of Directors-created committee addresses critical infrastructure security and operational reliability, with particular focus on vulnerability assessments, interdependencies, information exchange within the industry, and advocacy. This committee also provides oversight for many of the Natural Gas Security Committee's activities.

Natural Gas Council

The Natural Gas Council includes representatives from gas utilities, transmission and distribution pipelines, as well as gas producers, who meet quarterly to share information and provide leadership on issues affecting the security and reliability of the natural gas industry.

Energy Information Sharing and Analysis Center (ISAC)

To assist the nation's natural gas utilities, the Energy ISAC, an industry-wide database of electronic security threats, vulnerabilities, incidents and solutions, was created in the fall of 2001. The Energy ISAC is a rapid-response, central information point for information about potential threats.

Working with the Federal Government

The security, integrity and reliability of natural gas utilities is regulated by the U.S. Department of Transportation, with additional oversight by the the U.S. Department of Energy, the Federal Energy Regulatory Commission and the Environmental Protection Agency. AGA's member companies are actively engaged in working with all of these agencies, as well as the new Office of Homeland Security. Utilities are proud of their excellent record of safety and reliability — a record AGA's companies are actively and aggressively working to protect.



Homeland Security Advisory System



Representing the natural gas utilities who bring you the energy of America.

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Natural Gas Utilities:

Security and Reliability



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Delivering Energy to America for Over 100 Years

The events of September 11 have forced companies in every industry to reassess and reinforce their procedures to assure public safety. Natural gas utilities take this responsibility seriously and are up to the challenge. Truth is, they have been successfully developing, implementing and refining measures to address both natural or man-made threats to gas service for over a hundred years. As early as the 1800s, utilities had already implemented emergency plans to quickly restore service following floods or earthquakes. Today, utilities face a different threat. But they can apply many of the same time-tested principles on which they have built a history of reliable and safe service to their customers.



Proven Community Partnerships

Partnerships between gas utilities and local emergency response teams go back many generations. Law enforcement and fire and rescue services in every state work closely with natural gas utilities to coordinate the emergency response plans that utilities file with local authorities. Drills are regularly conducted to make sure everyone knows their job. It's common for local utility personnel to be among the first responders to the scene of an incident. That was the case September 11, when utility personnel responded to the attacks on the World Trade Center and the Pentagon right along with local fire and rescue workers.

Natural Gas Utilities Rely on 3 Fundamental Principles for Effective Security.

1 Experience.

Natural gas utilities draw on more than a century of experience in dealing with security threats. It is their training to look for and expect the unexpected, providing reliable service, just as Con Edison and Washington Gas did in the hours and days following September 11.

2 Physical structure

The natural gas delivery system's 1.2 million miles of buried pipelines minimizes the spread of hazards resulting from gas pipeline emergencies. Multiple redundancies along the delivery system provide operators flexibility to reduce pressure, re-direct, shut down or restore the flow of gas. Facilities for natural gas storage and alternative fuels provide additional options to continue the flow of gas in case of disruption.

3 Relationships

In case of emergency, local gas utilities can count on the assistance of other regional gas companies as well as the partnerships they've built with local emergency response and law enforcement. Con Edison and Washington Gas both benefited from offers of help, equipment and personnel from many other natural gas companies in the weeks following September 11.



Natural gas pipelines are buried and flow can be diverted for maximum flexibility

Improving on Excellence

Today, natural gas utilities are reexamining all of their procedures and will continue to improve and enhance security programs. Natural gas utilities are committed to improving their excellent and reliable service despite any threats, just as they have been doing for more than a century. Utilities have shared their best security practices with each other through conferences, workshops, task forces and committee meetings. As utilities have assessed their vulnerabilities and instituted appropriate, reasonable protections, many common initiatives have emerged. These include programs to:



- Strengthen physical barriers at critical facilities.
- Tighten control of access, using routine security screening measures and installation of sophisticated closed-circuit monitoring systems and intrusion-detection devices.
- Review and adjust frequency of company and law enforcement patrols to reflect current security levels.
- Increase contact with local, state and federal law enforcement agencies.
- Reexamine and, if needed, strengthen cyber systems to prevent hacking.

Security Evolving to Meet Changing Needs

The 60s and 70s
Natural gas utilities first dealt with the threat of domestic terrorism during the social upheavals of the 1960s and '70s. One utility reported almost 100 bombings and other sabotage incidents during that period. As a result, many utilities reinforced physical barriers and incorporated basic security principles into their contingency planning.



Year 2000 (Y2K)
Gas utilities spent more than \$1 billion to guard against possible disruptions from the Y2K computer programming glitch. No service disruptions occurred, and utilities gained the ongoing benefits of state-of-the-art technology and valuable insights into their cyber systems.

September 11 — New York City
The attack on the World Trade Center destroyed many natural gas pipelines, along with a spaghetti bowl of power and telecommunication lines and electric power substations. Despite extraordinary challenges, Con Edison was on the scene immediately after the attack and successfully isolated and contained potential leaks along the pipeline, even while dealing with communication and power losses.



Courtesy: Washington Gas



Courtesy: Con Edison

September 11 — The Pentagon
Washington Gas responded immediately to the report of a plane crashing into the Pentagon. Damage to critical natural gas infrastructure was contained, with most of the Pentagon unaffected by any disruption of service. The scale of the attack was unprecedented, yet Washington Gas employees responded to the "work ticket" as they are trained to do for any disruption on their pipelines. Gas utilities always "expect the unexpected".

Utility Planning for the Future

These are only a few of the scores of technologies that the natural gas industry is developing in partnership with federal and private experts. Many RD&D investments are underway, including:

- Modeling and simulation of pipeline disruptions due to terrorist attacks;
- Real time monitoring of excavation damage to pipelines;
- Car-stopping devices; and
- Data encryption protocols to prevent hacking of data acquisition systems.

