York County Natural Gas Authority
Patriots Energy Group

SUMMER 2021

pipeline connection

FOR EMERGENCY RESPONDERS

CYBER SECURITY & PIPELINES

How YCNGA and PEG Mitigate Risk

The recent ransomware attack involving Colonial Pipeline garnered world-wide attention and fuel shortages in the eastern portion of the United States. This event further highlighted the risks associated with cyber-attacks and the potential vulnerability of the nation's critical infrastructure including pipelines.

Most natural gas transmission and hazardous liquids pipelines are operated remotely through sophisticated supervisory control and data acquisition or SCADA systems. SCADA allows pipeline operators to monitor and control pipelines in real time enhancing safety and efficiency. The Patriots Energy Group (PEG) pipeline system operated by York County Natural Gas Authority (YCNGA) uses a SCADA system to monitor and manage daily operations.

With today's ever increasing risk associated with cyber-attacks, PEG and YCNGA have taken extensive steps to minimize the potential threat to our system.

Some of the steps taken include:

- **Separation between the company's information technology (IT) and operations technology (OT) systems**
- **Use of sophisticated antivirus/malware software and multiple layered firewalls**
- **On-going employee communications and education related to cyber security**
- **IT Department staff coordination with federal cyber security protection entities**
- **Real time system monitoring of attempts to infiltrate our IT and OT systems**

We recognize that the threat to our IT and OT systems are real and sobering. On any given day, there are thousands of attempted attacks to our systems that are thwarted by our cyber security efforts. It seems there are daily reports in the news media regarding ransomware attacks that take down critical systems in a variety of industry sectors. While no one can guarantee that any IT or OT system is completely impervious to attack, PEG and YCNGA remain vigilant to protect our system delivering critical energy to our customers.

Since you live and work in an area near our transmission and distribution lines, we encourage you to take an active role in helping keep our pipelines safe. Besides being aware of signs of a gas leak or digging along pipeline right-of-ways, please be alert to suspicious individuals or activities around our pipelines and contact police. As our partner in safety and an extra set of eyes and ears in the community, please stop and ask for ID if you see suspicious individuals or activities around our natural gas stations or pipelines.

SEE SOMETHING SAY SOMETHING

Pipeline Safety Demo & Seminar:

OCTOBER 12 & 14

Mark your calendars now for a return to in-person training this fall

Knowing how to respond to a pipeline incident and being prepared to work together is critical. Plan now to attend our fall safety seminars to develop and enhance response skills and learn about transmission and distribution systems, pipeline pressures, compression, damage awareness, natural gas vehicles and response coordination.

YCNGA Conducts Large Scale Outage Tabletop Exercise

In December of 2020, Black Hills Energy, a local distribution company supplying natural gas and electricity to 1.3 million customers in eight western states, experienced a domestic terrorism incident on their natural gas system in Aspen, Colorado. Individuals aligning themselves with the "Earth First" eco-terrorism group illegally accessed multiple valve sites on the Black Hills system and shut off gas service to 3,500 customers during a period of heavy snow and single digit temperatures. The most alarming aspect of the incident is the fact that the perpetrators were able to study the distribution system and isolate it at multiple locations.

While the official investigation is on-going, this incident was a wake-up call to the natural gas distribution industry forcing all of us to review security procedures and response to large scale outage events.

After reviewing the pertinent details of the Black Hills Energy incident, the York County Natural Gas Authority management team committed to execute a first ever large scale outage tabletop exercise using a simulated scenario based on the event in Aspen. In April of 2021 the exercise was conducted with a debrief immediately following.

CRIME AND COURTS

FBI aids in investigation of gas pipeline sabotage that turned heat off in Aspen

Black Hills Energy "hopeful" to begin re-lights for residential customers by Monday evening, but a snowstorm in the forecast could slow the process.

Jason Auslander 7:37 PM MST on Dec 28, 2020

ASPEN — The name of a radical environmental advocacy organization was scrawled Saturday on a pipe at a natural gas pumping station near Aspen that was vandalized, Aspen police said Monday.

It was not clear whether members of the "Earth First!" group were involved in the intentional disruption of gas service to the Aspen area – which resulted in thousands of people living without heat or hot water – but the name was found at one of three Black Hills Energy sites vandalized, said Bill Linn, Aspen assistant police chief.

"They would have had to have some familiarity with the system" to pull off the sabotage, Linn said. "They tampered with flow lines. They turned off gas lines."

THE MOST ALARMING ASPECT OF THE INCIDENT IS THE FACT THAT THE PERPETRATORS WERE ABLE TO STUDY THE DISTRIBUTION SYSTEM AND ISOLATE IT AT MULTIPLE LOCATIONS

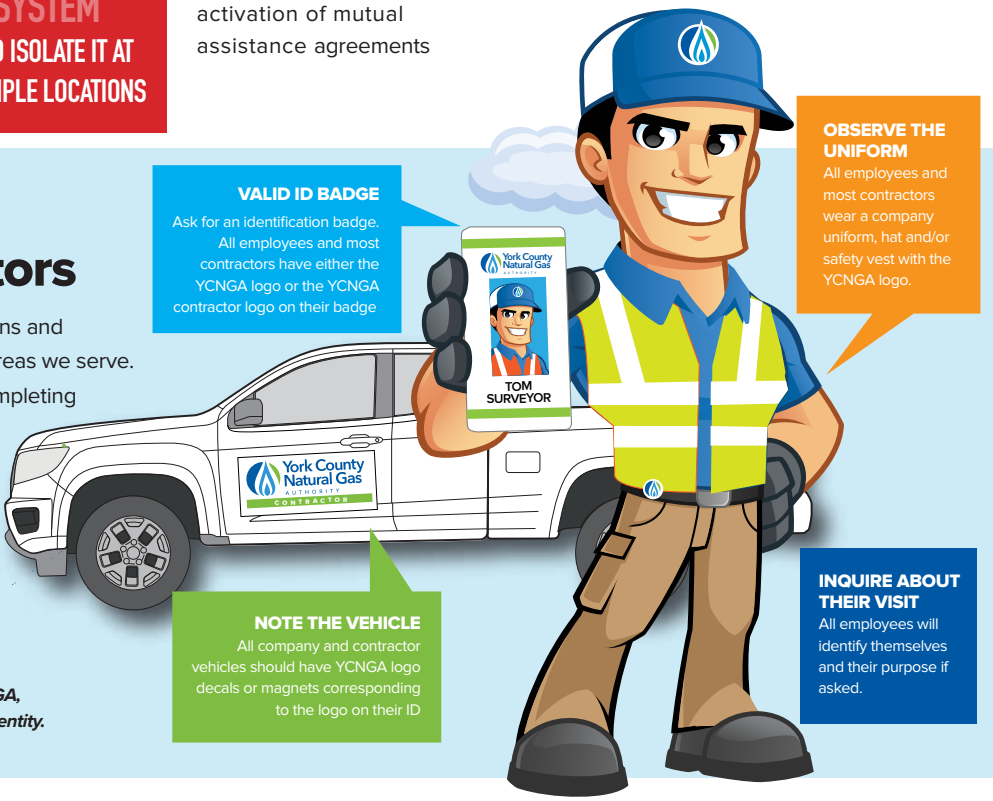
The scenario began with a weather report indicating extremely cold temperatures (11°F) combined with mild to heavy sleet. Gas Control received alerts of low pressure in the northern part of our system. Upon investigation, an individual associated with an environmental extremism group who was detained by law enforcement appears to have tampered with four YCNGA valves resulting in the loss of 4,300 customers. The YCNGA Corporate Response Team quickly transitioned into restoration of service mode which included activation of mutual assistance agreements with other distribution companies to respond and assist us. Securing warming centers, logistical support for incoming mutual aid crews, coordination of information for our customers and the news media became a major focus of the response. Additionally, plans to support investigations by local, state and federal officials and law enforcement were implemented.

While YCNGA has never experienced an outage of this magnitude, we learned several valuable take-aways and action items to address from a preparedness perspective. We hope we never have to implement procedures to respond to a large scale outage, but as the Black Hills incident showed the risk is real and requires continued diligence and preparedness.

How to Identify Our Employees & Contractors

York County Natural Gas Authority (YCNGA) technicians and approved contractors are constantly working in the areas we serve. Whether they're performing routine maintenance, completing a service call or surveying for leaks, everyone's safety is at the forefront of all we do. As our partner in safety and an extra set of eyes and ears in the community, please stop and ask for ID if you see suspicious individuals or activities around our natural gas stations or pipelines.

If you're unsure whether an individual is associated with YCNGA, contact us at (803)323-5304 or 866-578-4427 to verify their identity.



STANDARD OPERATING PROCEDURE

Establishing an SOP for Pipeline Emergencies

Standard Operating Procedures (SOPs) cover a wide variety of operations and response scenarios encountered by emergency response agencies. SOPs enhance consistency and safety by establishing predetermined (and approved) procedures for performing specific tasks, usually incorporating checklists. While response to pipeline incidents might not be as frequent as other types of incidents, responders should develop SOPs specific to these type of emergency events.

It is important to recognize that as with most emergencies, pipeline incidents can vary significantly in scope and scale. SOPs developed to address pipeline emergency response should maintain suitable scalability. While many response agency SOPs can be developed strictly through internal resources, pipeline operators should be consulted to assist in developing SOPs regarding response to pipeline emergencies.

The first step in creating a pipeline emergency related SOP is to determine the types of pipeline systems (natural gas transmission, natural gas distribution, hazardous liquids) that operate within the agency's jurisdiction. To assist in identification of transmission pipelines in your area consult the National Pipeline Mapping System at *https://www.npms.phmsa.dot.gov/*. Consideration should be given to establishing separate SOPs when pipelines in the area transport products with different physical characteristics requiring different response strategies.

Each pipeline operator should be invited to participate in the SOP development process. In addition to being a source of information regarding the physical properties and characteristics of the materials being transported, pipeline operators can share emergency response plans and procedures that can aid with development of the SOP. A robust SOP includes how emergency responders and pipeline operator personnel will participate in a unified incident command system structure, expectations of pipeline first responders, and mutually agreeable defensive and offensive actions to be taken by response personnel.

FOR EXAMPLE:

- What actions will be taken when responding to gas leaks, or outside force damage to pipelines?
- Will emergency responders engage in valving off single residential or commercial meter sets, and has this been coordinated with the local distribution company?

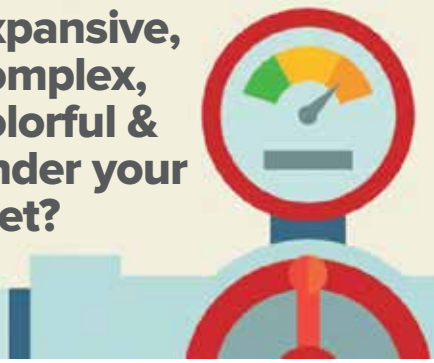
Scenario-based discussions are critical for effective coordination and SOP development.

Response capabilities are going to vary widely by organization, location, size, and culture. That's why an SOP for response to pipeline emergencies must be tailored to the individual department. Coordination with the pipeline operator(s) in your area is paramount. Procedures with SOPs should provide guidance that emphasizes specific actions that will be taken by the first responders and actions that will be taken by the pipeline operator.

> IN ADDITION TO BEING A SOURCE OF INFORMATION REGARDING THE PHYSICAL PROPERTIES AND CHARACTERISTICS OF THE MATERIALS BEING TRANSPORTED, **PIPELINE OPERATORS CAN SHARE EMERGENCY RESPONSE PLANS & PROCEDURES** THAT CAN AID WITH DEVELOPMENT OF THE SOP

DAMAGE PREVENTION IS A KEY GOAL FOR PIPELINE SAFETY

What's expansive, complex, colorful & under your feet?



Underground Pipeline Infrastructure!

The importance of calling SC811 by anyone conducting excavation activities cannot be overstated. Public sector emergency responders are keenly aware of the development operations that are occurring in urban areas that they serve and should always be mindful of excavation activities that may be creating a risk to underground pipelines and the public.

811

PIPELINE BASICS : FARM TAPS

If you travel around the county, especially in rural areas, you might occasionally notice a small piping and regulator set contained within a protective barrier usually adjacent to the roadway. These devices are commonly referred to as farm taps. Farm taps are service line delivery points to an individual customer that originate with a tap from a transmission or high pressure distribution pipeline. In addition to piping, the farm tap contains regulators that reduce the pressure of the natural gas to appropriate lower pressures suitable for delivery to the customer. YCNGA currently operates 97 farm taps throughout our service territory.

YCNGA CURRENTLY OPERATES 97 FARM TAPS THROUGHOUT OUR SERVICE TERRITORY

While occurrences are rare, there have been instances in which farm taps have been damaged by vehicles leaving the roadway and even mowing equipment striking the device. Unlike residential single meter sets, farm taps operate at higher pressures and depending on the nature of damage may not be easily isolated by first responders.

In the event of response to a damaged and leaking farm tap, it is imperative to request dispatch of the local distribution company operating the system. Standard response procedures including elimination of ignition sources, isolating the area, and standing by with a charged hose line should be considered.

As always if you would like additional information about pipeline operations and specifically farm taps and emergency response recommendations, please feel free to reach out to us at YCNGA.

CONTACT INFO

York County Natural Gas Authority

Emergency	(866) 201-1001
Non-Emergency	(803) 323-5304
Website	*ycnga.com*

Patriots Energy Group

Emergency	(888) 609-9858
Website	*patriotsenergy.com*

Chester County Natural Gas Authority

All Calls	(803) 385-3157
Website	*chestergas.com*

Lancaster County Natural Gas Authority

All Calls	(803) 285-2045
Website	*lcngasc.com*

SC811

Toll-free	(888) 721-7877
Website	*SC811.com*

National Pipeline Mapping System

npms.phmsa.dot.gov

SC Office of Regulatory Staff (SCORS)

ors.sc.gov

USDOT Pipeline Safety

primis.phmsa.dot.gov/comm/EmergencyOfficials.htm

Resources for Responders

It seems that we are becoming dependent on electronic tools for reference at an ever increasing rate. Whether it's the iPhone, iPad, laptop or a host of other "e-tools", we are all dependent on the instant access provided by these prolific devices. For those serving in the emergency response community, there are several resources that are available to assist in response to a hazardous materials incident, including a pipeline emergency. The best part – they're free!

WISER
Wireless Information System for Emergency Responders

WIRELESS INFORMATION SYSTEM FOR EMERGENCY RESPONDERS (WISER)

The WISER database which is managed by the National Library of Medicine contains detailed information on hundreds of hazardous substances. The WISER system provides responders with appropriate information based on one of three roles that they will be performing at the scene of an incident: first responder, hazmat specialist or emergency medical specialist. Information on WISER can be found at: https://wiser.nlm.nih.gov/

EMERGENCY RESPONSE GUIDEBOOK (ERG)

The U.S. Department of Transportation Emergency Response Guidebook (commonly referred to as the "ERG") contains pipeline safety information. Published every four years, the ERG is intended to be used during the initial phase of a hazardous materials incident. Distributed to public safety agencies in hard copy, the ERG is also available as a PDF and can be found at:

https://www.phmsa.dot.gov/hazmat/erg/emergency-response-guidebook-erg

Pages 20 through 25 of the ERG contain general pipeline safety information.

Training Opportunities for Your Department

York County Natural Gas Authority personnel are available to provide training to local emergency responders on how to safely handle a pipeline emergency. Please feel free to contact us for more information or to schedule a training session.

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