

Pipeline Safety

June 2017

Dominion Energy would build and operate the Atlantic Coast Pipeline on behalf of Atlantic Coast Pipeline, LLC, a company formed by four major U.S. energy companies—Dominion Energy, Duke Energy, Piedmont Natural Gas and Southern Company Gas.

Safety is the number one core value at Dominion. From construction through operations, safety will be the top priority of the Atlantic Coast Pipeline.

Dominion Energy operates one of the largest underground natural gas storage systems in the United States, maintaining nearly 15,000 miles of natural gas pipeline serving more than 6 million utility and retail energy customers.

Dominion's pipelines are part of the vast network, spanning more than 300,000 miles of pipelines that crisscross the country transporting natural gas. Pipelines represent the safest mode of transportation available for natural gas. Pipeline transport is safer than highway, rail, airborne and waterborne transport. The natural gas pipeline industry spends millions of dollars each year on research and new technologies to advance pipeline safety.

The U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) is the primary federal regulatory agency charged with making sure pipelines are safe, reliable and environmentally sound. The PHMSA oversees the design, construction, operation and maintenance of pipelines as well as pipeline employee training and state "one-call" programs.

Before Construction

The PHMSA develops and implements a wide variety of safety requirements for gas pipelines including, but not limited to, pipe and pipeline component design, welding, corrosion control, testing and operator qualifications. In addition to meeting all applicable PHMSA requirements, we at Dominion have our own exacting standards when it comes to designing, building and operating our pipelines.

During Construction

Site Safety

At Dominion, we strive to ensure safe, efficient construction sites. Procedures are in place to protect our employees, our contractors and the communities we serve during all phases of Atlantic Coast Pipeline construction.

Materials

Dominion uses only the highest quality materials to build our pipelines. The pipe and all pipeline components for the Atlantic Coast Pipeline will be vigorously inspected several times throughout the construction process. All materials must meet strict specifications.

Construction Phases

Each stage of construction has built-in safety requirements. For example, pipes will be coated with corrosion preventative epoxy and welds will be visually and radiographically inspected. Automatic shutoff valves will be installed to stop the flow of gas in case of an emergency. Cathodic protection, a low-voltage electrical system applied to the pipeline also will help prevent corrosion.



After Construction

Hydrostatic Testing

Before the Atlantic Coast Pipeline is put into service, the entire length will be pressure tested using water. Each section of the pipeline will be filled with water and pressurized up to a level higher than the maximum operating pressure. The test pressure will be held for a specific period of time to determine if it meets design strength requirements and if any leaks are present. This hydrostatic test is one of the final construction quality assurance tests.

Safety in Operations

Dominion employs highly trained staff with years of experience to operate our pipeline system in accordance with federal, state and local government regulations. The Atlantic Coast Pipeline will be monitored 24 hours a day, seven days a week, using sophisticated computer and telecommunications equipment at Dominion's Gas Control Center in Clarksburg, West Virginia. Operators will employ a number of safety measures, including:

- Computer-assisted control centers capable of detecting and interpreting pressure or flow changes in pipeline
- Remote controlled shutoff valves
- Regular aerial and foot patrols
- Periodic internal inspections using "smart pigs," high-tech instruments that travel through the line collecting millions of data points about the pipeline's condition



Integrity Management Program

The federal Gas Integrity Management Rule specifies how pipelines must identify, prioritize, assess, evaluate, repair and validate the integrity of gas transmission pipelines that could, in the event of a leak or failure, affect High Consequence Areas (HCA). For natural gas pipelines, HCAs are mainly populated areas. Dominion's pipeline integrity management program for the Atlantic Coast Pipeline will address all of the required components, including:

- High Consequence Areas
- Threat Identification and Risk Assessment
- Baseline/Continuous Assessment Plans
- Remediation/Prevention
- Recordkeeping Provisions
- Performance and Quality Assurance
- Management of Change
- Communications

Public Awareness and Safety: You can help!

Markers are used to show the approximate location of pipelines and identify the companies that operate them. Be aware of pipeline markers in and around your neighborhood. You can help keep the pipelines in your area safe.

In the unlikely event that you notice any of the following issues on or near the pipeline right of way, leave the area immediately and report the issue as soon as possible.

- Gas escaping from a pipeline: if you HEAR a high-pitched whistle or roar; or SEE a patch of discolored soil, dead vegetation, bubbling water or frozen ground when the weather is warm.
- Fire near or involving a pipeline right of way
- Natural disasters or other damage that might signify a hazardous situation
- Digging or construction on a pipeline right of way in the absence of pipeline personnel



Know what's below. Call before you dig.

If you plan work that will disturb the earth, contact a "One Call" notification center by dialing 8-1-1 for free location services at least three days prior to the start of the project.

