

Natural Gas System and Regulator Station Safety

First and foremost, safety is the foundation of our daily operations at Atlanta Gas Light. Utilities like ours must meet rigorous federal and state requirements to ensure that natural gas is delivered safely and efficiently through more than 2 million miles of distribution and transmission pipeline that serve more than 165 million Americans daily. More than that, we hold ourselves accountable to our own stringent internal controls to help ensure the safety of our employees and the public. Our outstanding safety record demonstrates our commitment.

At Atlanta Gas Light, we are continually improving our natural gas pipeline infrastructure here in Georgia. This system has more than 1,000 miles of transmission lines -- larger diameter pipes operating at higher operating pressure that transport the gas between communities — and nearly 31,000 miles of distribution mains — smaller diameter lines at lower operating pressure that deliver gas directly to local homes and businesses. This system brings safe, reliable and environmentally friendly natural gas to nearly 1.6 million customers throughout the state.

Since 1998, we have replaced approximately 2,300 miles of aging bare-steel and cast-iron pipe in Georgia, enhancing the safe operation of our system. In 2009, the Georgia Public Service Commission approved an important system upgrade to improve our ability to serve our customers with natural gas on peak demand days. The program is called Georgia STRIDE—Strategic Infrastructure Development and Enhancement — and, besides pipeline upgrades, will also include the installation of new regulator stations in some communities. This investment in new infrastructure will improve our ability to serve all customers on the coldest days of the year when they need us most.

Our comprehensive Pipeline Integrity Management Plan provides for the ongoing assessment of the integrity of our transmission lines. Through in-depth assessments utilizing various techniques and devices, we look for anomalies in the pipeline such as corrosion, third-party damage and coating damage, and then make the appropriate repairs.

In addition to upgrading our system and maintaining the safe condition of our pipelines through regular inspections, we use state-of-the-art technology to ensure the integrity of our system. Our Gas Control Operations Center in Atlanta continuously monitors the flow of natural gas through our pipelines and any changes in operating conditions. Our gas controllers have the ability to adjust flows and operational pressures, and to shut off natural gas flowing in our transmission lines.

Further, Atlanta Gas Light undertakes a wide range of safety procedures and programs including:

- Installing above-ground markers to indicate the location of certain portions of our buried gas lines.
- Performing regular visual inspections and leak surveys of our systems to identify potential problems.
- Maintaining detailed requirements for qualification and inspection of construction techniques used in our systems.

- Adding mercaptan, a rotten-egg smell, to odorless natural gas so that customers and the public can smell leaks if they happen.
- Educating the public on the importance of “Call Before You Dig” and dialing 8-1-1 to prevent third-party damage to natural gas pipelines.
- Supporting research and development focused on inspection technologies, pipeline integrity, corrosion prevention and construction techniques through the American Gas Association.

Regulator Stations

Natural gas moves through the Atlanta Gas Light Company system through a series of distribution lines that range from 2 inches to more than 24 inches in diameter. Within each distribution system there are pipelines that operate at varying pressures.

Regulator stations serve to protect the pipeline system and ensure it operates safely by reducing the pressure as the gas flows further into the system, similar to the way an electric transformer steps down voltage to a level suitable for residential use. Generally speaking, the closer natural gas gets to a customer, the smaller the pipe diameter is, and the lower the pressure.

Every regulator station contains safety devices to ensure that the pipe downstream cannot be over-pressured. These safety devices can include additional regulators, relief valves and remote monitoring equipment, all of which are maintained on an ongoing basis by Atlanta Gas Light’s trained and experienced field employees.

These regulator stations supply gas downstream to mains which will ultimately deliver gas to your home. As the gas moves through the service line to your home, it passes through yet another regulator at the meter to reduce pressure so that when a gas furnace or stove is turned on, the gas safely ignites in its familiar clean, blue flame.

Maintaining Safety at Regulator Stations

Regulator stations are a necessary part of the pipeline system that brings gas safely to your home. Therefore, utilities are required by federal regulation to inspect and test these stations throughout the year to verify they are:

- in good mechanical condition;
- adequate in capacity and reliability of operation;
- set to function at the correct pressure; and
- properly installed and protected from vehicular traffic, dirt, liquids, icing and other conditions that might prevent proper operation.

Atlanta Gas Light understands that the communities we serve may have aesthetic concerns about where we locate regulator stations, which is why the company will often use sound mitigation walls, fencing and landscaping around these facilities.