Natural gas pipeline safety – Pipeline valve replacement and retrofitting

One of our top priorities is providing you with safe and reliable energy. This means we're always monitoring our gas and electric systems. As the region continues to grow, so does the need for energy. To keep up with the increase in energy use, we'll make upgrades to our systems.

We construct, operate and maintain our pipeline system to meet or exceed all applicable federal and state regulations and requirements. Through our testing activities we measure a pipeline segment to make sure it's sound – in other words, the pipeline has "integrity". Among the key safety components in testing, maintenance and daily operational activities are pipeline valves.

About valve replacement and retrofitting

Valves are mechanical devices that control the flow of natural gas through the pipelines. An open valve allows the flow of natural gas to move freely. A closed valve shuts off the flow of natural gas to a pipeline segment to allow for maintenance, testing, or replacement of that segment.

Our transmission pipelines are equipped with valves that separate our pipelines into sections. These valves are called mainline valves, and they are situated inside underground pipelines. A mainline valve usually has a stem extension that reaches through to the surface and connects to either a hand wheel or an actuator. A hand wheel is a device that must be turned by hand by qualified field personnel to open or close the valve. An actuator is a device that can open or close the valve manually by qualified field personnel, or be triggered automatically when equipped with power and specialized communication systems technology.

Continued on back ▸

SDG&E® by the numbers

We provide clean, safe and reliable energy service to 3.7 million consumers through 1.49 million electric meters and more than 905,000 natural gas meters in San Diego and southern Orange counties.

Contact

Thank you in advance for your patience and cooperation while we work in your community. If you have any questions or concerns, please call us at **1-833-411-7343**

For more information, visit ***sdge.com/PipelineSafety***

Using specialized technology

One type of technology allows valves to be opened or closed remotely by system operators from a central control location.

These are called Remote Control Valves (RCVs). Other valves are equipped with a control device that automatically triggers the actuator and shuts off the flow of natural gas in the event of a large pressure drop. These are called Automatic Shut-off Valves (ASVs). Additionally, many of these valves provide routine pressure control to safeguard against exceeding the pipeline's maximum pressure.

Upgrading or retrofitting valves on the pipeline system with RCV and ASV technology provides gas control operators with greater flexibility and shorter response times if it becomes necessary to close a valve or valves quickly in the event of an emergency, such as an earthquake.

Safety during a replacement or retrofit

Safety always comes first when replacing or retrofitting a valve with RCV or ASV technology. Before work begins on the valve, the flow of natural gas into the pipeline segment is turned off at the nearest valve on each side and the natural gas is safely removed by venting. The new valve or retrofitted equipment is installed and then tested to affirm it's functioning properly. Then natural gas is safely reintroduced into the pipeline segment and it's brought back into service. Expanding the number of remote-controlled and automatic shut-off valves is one of the ways we maintain the safety and integrity of our natural gas pipeline system.

What to expect

We'll work as quickly and safely as possible and make every effort to minimize disruptions. But here's what you may potentially experience:

- Seeing trucks and equipment on the streets
- Excavation sites
- Temporary "No Parking" signs on streets
- Possible lane reductions or closures, detours
- Temporary delays on surface streets
- Work-related noise
- Occasional odor of natural gas

In some instances, our work may require us to shut-off natural gas service for safety purposes. It this is necessary, we'll contact you in advance to help make sure you're prepared.

Timing

Construction time varies for each project – from a week or less for minor retrofits, to several weeks for more significant work such as valve replacements, relocation and retrofits. The timing depends on a number of factors such as how long it takes to obtain the necessary permits, permissible working hours as determined by the local jurisdiction, traffic control, location and access to the valve, amount of excavation necessary to install the valve, and even the weather.

P.O. Box 129831 | San Diego, CA 92112-9831 | 1-800-411-7343 | Connect at ***sdge.com***