



Did you know?

In SDG&E's service area, there are **16,500** miles of power lines, **230,000** power poles and **155,000** power transformers. Over **1.4 million** electric meters and **860,000** natural gas meters serve **3.4 million** customers.



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Natural gas pipeline safety – strength testing

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're making upgrades to our systems.

We construct, operate and maintain our pipeline system to meet or exceed all applicable federal and state regulations and requirements. Our testing activities ensure that a pipeline segment is sound and has integrity. A common method for assessing pipeline integrity is with strength testing.



A pipeline test head cap is carefully welded to the end of a pipeline segment to be strength tested.

About strength testing

With this process, water is used to exert pressure on a pipeline at levels much greater than its usual operating pressure. The segment of pipeline that's being tested is temporarily removed from service and excavations are dug at both ends of the segment to expose the pipeline. Then, the natural gas inside is safely vented.

Short sections of pipeline are removed from both ends of the segment to be tested and the ends are sealed with test caps. Next, the sealed test segment is filled with water using a pump. The water pressure is increased to a point higher than what the pipeline would normally operate – to determine if there are any leaks. After holding the increased pressure for eight hours or more, the test is complete. After the water is drained from the pipeline test segment and the test caps are removed from the ends, the pipeline segment is thoroughly dried. New replacement pipe is installed at both ends to reconnect the pipeline segment into the system. Natural gas is safely reintroduced into the pipeline and brought back to service.

Safety during strength testing

Safety always comes first when performing a test. We have plans in place and repair teams standing by in the event a pipeline fails the test or needs to be repaired. If a pipeline ruptures during testing, a large amount of water will be released at the rupture site but it should dissipate quickly.

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If the strength test of a pipeline section results in a leak or rupture, the pipeline will be repaired or replaced. If repairs are needed, we'll make them and perform a second strength test to ensure there are no leaks.

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 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. If this is necessary, we'll contact you in advance to help make sure you're prepared.

Contact information

Thank you for your patience and cooperation while we work in your community. If you have any questions or concerns, please call **1-866-382-0886**. For more information, visit [sdge.com/psep](https://www.sdge.com/psep).



Water is pumped into a test head to conduct a strength test.