

# COMPRESSOR STATIONS

## Safety

**Safety is the number one core value at Dominion Energy.** From construction through operations, safety will be the top priority of every pipeline project.

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. Remote controlled 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.

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



*Dominion Energy's Gas Control Center operates 24 hours a day, 7 days a week.*

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
- An extensive Public Awareness Program



*Although pipelines operate underground, in-line inspections can be conducted using smart pigs.*



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## Air Quality

The new equipment associated with the minor modifications will be designed to meet or exceed all applicable federal, state and local requirements, including those through Pennsylvania Department of Environmental Protection, the U.S. Environmental Protection Agency and others.

A variety of controls will be implemented to minimize emissions and protect the air quality in the surrounding communities. Examples include:

- equipment and inspection procedures that will minimize the potential for methane (greenhouse gas) to be released into the atmosphere; and
- dry seals will be used to increase the safety, reliability and efficiency of compressors, while minimizing emissions.



*JB Tonkin Compressor Station Westmoreland County, Pa.*

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## Noise Control

The Federal Energy Regulatory Commission (FERC) requires that the sound from the operation of a new or modified compressor station not exceed 55 decibels at any noise sensitive area (NSA), such as a school, hospital or residence, in the vicinity of the station. The 55 decibel limit is required regardless of the equipment inside or outside the facility. FERC guidelines also require that the operation of the compressor station should not result in a perceptible increase in vibration.

Dominion Energy will complete ambient sound studies and acoustical analyses for facility sites. For the analysis, the existing sound levels are combined with the expected sound contribution at the nearest NSA. Noise mitigation measures are then developed to achieve the desired level.

The result of acoustical analysis indicates that, with the specified noise control measures successfully implemented, the continuous sound attributable to the station operating at full-rated load will be lower than the FERC limit of 55 decibels at all nearby NSAs.

The modifications to the compressor stations may utilize a number of noise control measures, including:

- mufflers on the exhaust of each turbine unit, the air-handling units, the building walls and the ventilation discharge hoods;
- acoustic insulation on exhaust pipes and intake ducts of each turbine unit as well as all above-ground sections of the unit suction, discharge and bypass lines;
- air cleaners and silencers on intake ducts;
- sound dampening materials on walls and roof panels; and
- insulated metal and full weather stripping on doors

### NOISE SENSITIVE AREAS

Areas used by people (such as schools, hospitals or residences) or those inhabited by special status wildlife species. The areas must be managed to limit the noise level from long-term and/or continuous noise-producing sources.



*Acoustic insulation shown on exterior pipe sections*