Westmoreland Generating Station

Questions & Answers

Why is this project located in Westmoreland County?

Westmoreland County is an excellent location for a power plant that will help supply energy to the PJM Interconnection transmission system, which coordinates the movement of wholesale electricity in all or parts of 13 states, including Pennsylvania, and the District of Columbia. The specific site was selected because of its access to existing natural gas pipelines and transmission lines and the availability of adequate amounts of water. This minimizes the need for new infrastructure.

Additionally, several coal-fueled plants in the region have or are expected to retire. The Westmoreland project would help replace that lost generation with power produced from clean-burning natural gas and fewer emissions.

Also, the fact that area leaders promote business growth in the county is instrumental in the successful development of these projects.

How much land will the project use?

Tenaska owns 400 non-contiguous acres in Westmoreland County, some of which were acquired to provide rights-of-way. The parcel on which the project will be built totals 134 acres, although the facility will comprise just 50 acres. The rest of the parcel would remain wooded or pastured as buffer.

How much of the power this plant generates will stay in Westmoreland County?

Power produced by the Westmoreland Generating Station would serve the PJM Interconnection transmission system, which coordinates the movement of wholesale electricity in all or parts of 13 states, including Pennsylvania, and the District of Columbia. However, that power would contribute to the reliability of the power grid that serves Westmoreland County.

What will the nearest neighbor see, hear or smell?

The power generating facility would encompass roughly 50 acres of the 134-acre site; the rest would remain wooded or pastured as buffer. The plant would have three stacks – two 180 feet tall and one 120 feet tall – that may be partly visible from some angles and distances off-site. Outdoor lighting at the facility would be pointed downward and inward. Neutral paint colors and landscaping would enhance the aesthetic look of the facility.

Energy production equipment would be enclosed in a building, muffling sound from plant operation. Sound at the plant's fence line typically is similar to the decibel level matching a conversation between two people.

There have been no odor concerns expressed at any Tenaska plant site.

How will children in the nearby school be protected?

Modern power plants are safe, and we consider safety – of our employees and the communities where our facilities are located – our highest priority. Tenaska has a 27-year history of developing, constructing and operating safe, efficient and reliable power generating stations and is repeatedly recognized for its commitment to the environment, safety and the communities where it does business. The Pennsylvania Department of Environmental Protection creates and enforces regulations that are protective of the health and safety of Pennsylvania residents, and we must meet or be better than those standards.

The Westmoreland Generating Station site includes land buffers between the facility and most neighbors that would decrease their awareness of the site. The closest school is about one mile away from the project's property line. During construction, Tenaska works with area schools to schedule equipment deliveries around school bus operation hours.

What safety measures will be employed at the plant?

Safety is of the utmost importance for Tenaska, and we work hard to design a safe plant that is protective of surrounding residents and wildlife, a plant that will be operating and safely employing people for decades to come.

The Westmoreland Generating Station would be fueled by natural gas, the cleanest fossil fuel for power generation, and would be operated safely and in an environmentally responsible manner. Tenaska is recognized annually for safety records at the plants it operates and is recognized in the industry for its commitment to environmental stewardship in the siting, design, construction and operation of its projects. The Westmoreland project is designed and would be built to meet or be better than all local, state and federal health-based environmental standards.

Natural gas by its nature is combustible, but it's used safely in millions of homes across America, as well as in vehicles and in manufacturing/industrial facilities, including power plants. Tenaska owns and operates other natural gas-fueled power plants and has never had a natural gas explosion at one of its facilities. Every precaution is taken to always maintain the plant in a safe manner.

What emissions will be regulated for the plant?

Power plants developed by Tenaska are designed, constructed and operated to meet or be better than all applicable state and national environmental standards. Natural gas is recognized as today's cleanest commercial fossil fuel for power generation; emissions will be very low. The emissions most regulated for natural gas-fueled plants are nitrogen oxides and carbon monoxide. However, the combination of natural gas as fuel, state-of-the-art design and best available/lowest achievable control technology will limit emissions.

A clean-burning natural gas plant will also provide a cleaner source of electricity for the region as nearby coal power plants retire. Our models show that the Westmoreland plant will be able to replace 38 percent of the electric generating capacity lost through coal plant retirements with less than 1 percent of the emissions.

How will the plant preserve our air quality?

Emissions from this plant will not significantly affect air quality. Air quality modeling has demonstrated that all ambient air quality standards will be met, taking into account emissions from the facility and more than 65 other regional sources, as well as existing background concentrations already monitored by the Pennsylvania Department of Environmental Protection and the U.S. Environmental Protection Agency.

The combination of clean-burning natural gas as fuel and best available/lowest achievable emission control technology will ensure that emissions meet or are better than all applicable state and national standards. Tenaska submitted a complete analysis of air quality impacts as part of the air quality permitting process.

How is the wastewater regulated and monitored?

The Pennsylvania Department of Environmental Protection (PA DEP) is authorized by the U.S. Environmental Protection Agency to administer the National Pollutant Discharge Elimination System (NPDES). The NPDES permit establishes effluent limitations and the monitoring frequency of the return water to the river. Tenaska is responsible for monitoring and reporting the parameters listed to maintain compliance with the NPDES permit. PA DEP derived the effluent limitations based on a flow criteria of 1.2 million gallons per day in an effort to apply the most stringent regulatory requirements.

How will wastewater from the plant be discharged into the Youghiogheny River?

The amount of water discharged into the river is based on weather and plant dispatch. Tenaska expects the annual average daily discharge to be on the order of 0.5 million gallons per day.

The wastewater will consist of potable water that has been used by the power plant for cooling and other purposes. The wastewater will be treated as necessary to meet the limits in the plant's National Pollutant Discharge Elimination System (NPDES) permit.

The temperature of the water discharged into the river will be a couple of degrees above the air temperature. Additionally, the water discharge at any given time is not permitted to exceed conditions contained within our permit.

How will Tenaska control the amount of water it discharges to the Youghiogheny River, particularly during floods?

The project is required to control storm water runoff from the 50-acre plant site as part of its National Pollutant Discharge Elimination System (NPDES) permit. To meet this requirement, Tenaska has designed storm water retention basins that limit the amount of storm water discharged to area streams tributary to the Youghiogheny River. This measure alone will not prevent flooding conditions, but it will delay some of the storm water flow from the plant to the river during storm events. The return water flow from the plant is not subject to restrictions during flooding events.

What benefits will the plant bring to the community?

In addition to providing reliable power for the region, the project would be expected to provide more property tax revenue to local units of government; boost the local economy, with a total estimated construction cost of more than $500 million; and create more than 300 jobs, on average, during construction and up to 25 well-paying, full-time jobs during operation. At the same time, the plant would create little demand for local services, such as schools, police or roads.

There will be additional "trickle down" benefits during construction and operation, as the construction workers and plant employees eat in restaurants and shop in local establishments. In addition, there will be a number of opportunities for ongoing contracting work to local companies. We have spoken to local economic development representatives who say a conservative rule of thumb is that a large capital intense project such as this one brings seven times the amount of its investment in overall economic benefit. For our project, that would mean, conservatively, an overall economic impact of $3.5 billion.