Astoria Station

On-site fuel inventory





Astoria Station is part of our diverse mix of energy resources that helps us maintain safe, low-cost service while ensuring continued reliability. This 245-megawatt (MW) simple-cycle natural gas combustion turbine, located in Deuel County, South Dakota, started producing energy in May 2021. We'll share updates as the project progresses.

Bolstering reliability and providing rate stability

We're planning to add an on-site fuel inventory system to strengthen the unit's reliability. Adding this system will provide rate stability for our customers by ensuring access to fuel during market disruptions. It also will help protect our customers from and account for reliability and financial risks when renewable generation isn't available, on-demand natural gas is limited, and market electricity and natural gas prices are extremely high.



HOW IT WORKS

- Astoria Station receives natural gas through a pipeline. Our on-site fuel inventory will safely store Liquid Natural Gas (LNG) natural gas cooled to condense into a non-toxic, non-corrosive, non-flammable liquid—so it's available when needed.
- Cooling LNG reduces volume approximately 600 times, allowing economical transport to Astoria Station and safe storage when it arrives.
- The system uses two 100% submersible pumps that resemble giant well water pumps to move LNG through the vaporization process.
- Once in its vapor form, the gas provides fuel for Astoria Station.
- The approximately five-milliongallon metal tank stores fuel for up to five days of full-load operation.

