

Beaver Valley Nuclear Power Plant

Shippingport, PA

Vistra's Beaver Valley Nuclear Power Plant produces 1,872 MW of emissions-free nuclear power — that's enough to power around 1.5 million homes.

Beginning commercial operation in 1977, Beaver Valley employs more than 600 employees year-round, with additional contractors and temporary staff added during refueling outages and maintenance windows.

The plant is home to two reactors contained inside reinforced concrete walls that are nearly 5-foot thick. It's two landmark cooling towers — each one roughly 500 feet tall — sit alongside the picturesque Shippingport Bridge on the Ohio River.

Beaver Valley is part of Vistra's larger generation fleet in Pennsylvania, with a total of 3,805 MW of generating capacity from our one nuclear and three natural gasfueled power plants serving Pennsylvania through the PJM market. Our family of companies is proud to support the communities where our employees and customers live, work, and grow.

1,000

Vistra's property on the Beaver Valley site covers roughly 1,000 acres in the area in and around Shippingport, PA.

100%

In 2022, Beaver Valley had Operation Availability and Energy Availability factors of 100%, according to the IAEA.

2047

Most recently renewed in 2009, Units 1 and 2 at Beaver Valley are licensed to operate until 2036 and 2047, respectively.

794 T

In 2022, the EIA estimates Pennsylvania consumed 794 trillion Btus of nuclear electric power across the state.



Quick Facts

- Beaver Valley Nuclear Power Plant is one of the largest employers in Beaver County, and contributes millions of dollars in property tax to Pennsylvania communities each year.
- Any water discharged from the plant is controlled to meet regulatory standards and to protect aquatic life. Since beginning operation in 1977, the diversity of fish species in the nearby Ohio River has nearly doubled.
- The clouds that emit from the cooling are water vapor. The plant produces zero carbon dioxide or other greenhouse gases.
- Each year, operation of the Beaver Valley Nuclear Power Plant avoids putting 9 million metric tons of carbon into the atmosphere.
- The Institute of Nuclear Power Operations (INPO) recognizes Beaver Valley at an exemplary performance level — a distinction given only to the safest and highest performing nuclear plants in the United States.