



# Ferndale Generating Station

## Providing clean, reliable energy

Puget Sound Energy strives to ensure that its customers receive safe and dependable electric service at a reasonable price. One way PSE does that is by maintaining a varied mix of power-supply resources. A diversified power portfolio reduces risk—and costs—when droughts, power-plant failures, transmission-line interruptions or other circumstances limit the availability of one form of power and, in turn, drive up wholesale energy prices. PSE’s power resources consist primarily of hydropower, wind power, natural gas-fired generation, and coal-fired power from Montana. While hydroelectricity represents the largest single share of PSE’s power-supply mix, electricity from clean-burning natural gas-fired generating stations also makes up a significant portion.

### Power output

The Ferndale plant can produce 270 megawatts of electricity when operating at maximum capacity. That is enough power to meet the peak electricity needs of about 200,000 households.

### Location

The facility is located about 100 miles north of Seattle, near Ferndale, Wash., in Whatcom County. PSE also owns three other natural gas-fired power plants in Whatcom County for serving PSE customers: the Sumas Generating Station, Whitehorn Generating Station, and Encogen Generating Station.

### Facility profile

Built in 1994 by Tenaska Washington Partners, L.P., and purchased by PSE in November 2012, the Ferndale power plant employs modern, “combined-cycle combustion turbine” technology that allows it to generate electricity using both a natural gas-fired turbine generator and, from the exhaust heat of its two gas-fired generating units, a steam-powered turbine. The two-stage process boosts operating efficiency, lowers fuel costs, and cuts air emissions. Combined-cycle plants like Ferndale operate more efficiently than single-cycle gas-fired plants. The latter typically run only to help meet daily or seasonal peaks in customers’ power usage, while combined-cycle plants often operate to help meet utility customers’ base power requirements. They also complement hydro and wind-powered generation because gas-fired plants can operate on a firm schedule while power generation from hydro and wind-generating facilities is dependent upon Mother Nature.

### Personnel

Twenty-one full-time employees operate and maintain the Ferndale facility.

### Tax benefits to public

In addition to the clean, dependable electricity the plant provides to PSE customers, the Ferndale facility generates significant tax revenue for local schools, roads, and other public services.