



Whitehorn Generating Station

Ensuring reliable electric service

Puget Sound Energy strives to ensure reliable electric service at a reasonable cost by acquiring power supplies from a variety of different sources, both PSE-generated and purchased from other suppliers. These sources primarily are hydropower, wind power, natural gas-fired generation, and coal-fired power from Montana. This diversified-portfolio strategy minimizes risk—and costs—in the event that an unforeseen circumstance (a drought, for example) causes regional shortages in one form of power and, in turn, drives up wholesale power prices. While hydroelectricity comprises the single largest share of PSE’s total power-supply mix, electricity from clean-burning natural gas-fired facilities also makes up a significant share—about one-fifth of PSE’s total.

Power output

The Whitehorn Generating Station can produce 147 megawatts of electricity when running at full capacity. That is enough power to meet the peak electricity needs of about 110,000 households.

Location

The Whitehorn facility is located near Ferndale, Wash., about 120 miles north of Seattle.

Facility profile

PSE employs the Whitehorn facility primarily to provide back-up “peaking” energy for the utility’s power system during daily or seasonal spikes in customers’ power usage. The plant is capable of being started remotely from PSE’s electric-dispatch center and reaching full generating output within 10 minutes. This quick-start capability helps to ensure service reliability for PSE customers during electrical-system emergencies. The plant has two “single-cycle” (also called “simple-cycle”) combustion-turbine generating units. Both units were installed in 1981; PSE overhauled one in 2006, and the other in 2008. PSE leased the two generating units until February 2009, and then purchased them outright. PSE’s original Whitehorn generating unit, installed in 1974, was decommissioned in 2000.

Personnel

Three full-time PSE employees operate and maintain the Whitehorn Generating Station.

Tax benefits to public

Property taxes levied on PSE’s Whatcom County facilities, including the Whitehorn Generating Station, provide significant revenues for local schools, county roads, and other public services. PSE property taxes in Whatcom County totaled nearly \$3 million in 2008.