Goldendale Generating Station Ensuring reliable electric service

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Goldendale Generating Station

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.

PSE today owns nine natural gas-fired plants, all in Washington state. One of these is the Goldendale Generating Station in Klickitat County.

Power Output

Goldendale is rated to produce 277 megawatts of power when operating at maximum capacity. That is enough power to meet the electricity needs of about 200,000 households.

Location

Goldendale is located 215 miles southeast of Seattle, roughly 10 miles north of the Columbia River and the Washington-Oregon border.

Facility Profile

Goldendale came online in 2004 and PSE purchased it in February 2007. The plant employs modern, "combined-cycle combustion turbine" technology that allows it to generate electricity using both a natural gas cycle and, from the exhaust heat of its power-generating turbines, a steam cycle. The two-stage process boosts operating efficiency, lowers fuel costs, and cuts air emissions. Combined-cycle plants like Goldendale 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

Eighteen full-time PSE employees operate and maintain Goldendale.

Tax Benefits to Public

Property taxes levied on PSE's Klickitat County Goldendale facility provide significant revenues for local schools, county roads, and other public services.



