Modern facility helps ensure 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 Mint Farm Generating Station can produce 310 megawatts of electricity when running at maximum capacity. That is enough power to meet the peak electricity demand of about 230,000 households.

Location
The plant is located in the Mint Farm Industrial Park of Longview, Wash., about 130 miles south of Seattle.

Facility profile
The Mint Farm facility came online in January 2008, and was acquired by PSE in December 2008. The plant employs modern, “combustion-turbine, combined-cycle” technology that allows it to generate electricity using both a natural gas cycle and, from the exhaust heat of its power-generating turbine, a steam cycle. The two-stage process boosts operating efficiency, lowers fuel costs, and cuts air emissions. Combined-cycle plants like Mint Farm operate much 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
There are 21 full-time PSE employees that operate and maintain the Mint Farm Generating Station.