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# BILL ANALYSIS

# Technology, Telecommunications & Energy Committee

## HB 2102

**Brief Description:** Creating the diversification of electricity supply and demand management act.

**Sponsors:** Representatives Poulsen, Crouse, Campbell, Kenney, Linville, Conway, Ruderman and Schual-Berke; by request of Governor Locke.

#### Brief Summary of Bill

- Establishes a minimum standard for the mix of energy resources that must be used by electric utilities in meeting the electricity needs of its customers.
- · Requires utilities to determine ways to reduce peak daily demand for electricity.
- · Provides retail sales and use tax exemption for purchases of smart metering technology by an electric utility of up to \$50 per customer served, starting July 1, 2003.
- Provides a public utility tax deduction for purchases of up to \$100 per customer served by smart metering technology by an electric utility, if the utility has installed such technology for 30 percent of its customers by July 1, 2001.

Hearing Date: 2/19/01

**Staff:** Pam Madson (786-7166).

#### Background:

Traditionally, electric utilities have been guided in their efforts to acquire resources for meeting their customers' demand for electricity by a least cost planning analysis. Utilities choose a mix of supply and demand side resources that minimizes the cost of services to the customer. The mix may include electricity that is generated by the utility itself, purchased on long-term contracts from other producers, or may include some electricity

purchased on the short-term or spot market. It may also include conservation and energy efficiency.

In Washington, most of the electricity generated comes from hydroelectric projects. Hydroelectric project account for 83 percent; coal represents 6.8 percent; nuclear power supplies 4.7 percent; and natural gas supplies 4.3. Non-hydro renewable resources such as wind, solar, or biomass represents 1.1 percent.

Though the Pacific Northwest has had some of the most successful conservation and research programs in the country, the recent history of investment in conservation and energy efficiency is one of decline. Investment in energy efficiency in Washington peaked in 1993 at approximately \$155 million and has declined to an estimated \$44 million in 1998. The Bonneville Power Administration's funding of energy efficiency research and investments has also dropped sharply.

Electricity load is the amount of electricity delivered to electricity customers and electricity demand is the rate of electricity used by customers. Peak load refers to the maximum total energy on a given utility system for a specified time period, for example, certain hours in a day or certain times of the year. In the Pacific Northwest, the peak time of year has been December and January. There are also times of the day when the load is significantly greater. Peak load management seeks to reduce the difference between the average load and the peak load.

The Northwest region has seen a growth in demand for electricity while at the same time has not seen much in the way of new generation. The Northwest Power Planning Council's prediction of an increasing possibility of power supply problems during the next few years and the region's recent experience with unprecedented high prices in the western power markets has focused attention again on conservation and energy efficiency and on development of alternative energy sources. The current market prices of electricity are making investments in renewable resources more economically viable than in the past when they have been significantly more expensive than fossil fuels.

Smart meters represent an innovation in electricity measurement technology. Smart meters are devices that allow utilities and customers to potentially measure the electricity usage of different appliances, to identify the time of day electricity is consumed, and to provide a time history of power and energy demand. Some smart meters are intended to be able to communicate this information back to a utility or central data collection point to potentially allow dynamic adjustments in electricity service.

The retail sales tax applies to the selling price of tangible personal property and of certain services purchased at retail. The use tax is imposed on items used in the state that were not subject to the retail sales tax, and includes purchases made in other states and purchases from sellers who do not collect Washington sales tax. The taxes are imposed at a 6.5 percent rate by the state. Cities and counties may also impose local retail sales and use taxes. As of January 2001, local rates that have been imposed range from 0.5 percent to 2.3 percent.

Unless specifically exempted in statute, all items and services in the tax base are subject to

the retail sales and use taxes. Major items exempt from sales and use tax include food for human consumption, motor vehicle fuel, utility services, professional services (e.g., medical, legal), certain business services (e.g. accounting, engineering), and items that become a component part of another product for sale. No exemption is provided for electric meters.

Public and privately-owned utilities, and certain other businesses, are subject to the state public utility tax (PUT). The PUT is applied to the gross receipts of the business. For light and power businesses, the applicable tax rate, including permanent surtaxes, is 3.873 percent.

In calculating the PUT, certain deductions from a utility's gross receipts are available. For example, a deduction is allowed for costs of producing energy through cogeneration facilities or renewable energy resources. No deduction is allowed for the purchase or installation costs associated with electric meters.

#### Summary of Bill:

#### Qualified diverse energy resources standard

A standard is established for ensuring that each utility provides a minimum percentage of its electricity resources from qualified diversity resources for its Washington customers. Qualified diversity resources include alternative energy resources or conservation and efficiency resources.

Alternative energy resources include wind, solar energy, geothermal energy, landfill gas, wave or tidal action, gas produced during wastewater treatment, or biomass energy based on clean wood waste or energy crops.

Beginning January 1, 2007, each utility must provide at least 5 percent of its electricity resources from qualified diverse energy resources. Of the 5 percent, 1.25 percent must be alternative or renewable energy resources and 1.25 percent must be conservation and efficiency resources. The percentage increases on January 1, 2012, to 10 percent with 2.5 percent from alternative or renewable resources and 2.5 percent from conservation and efficiency resources.

Certain limited exemptions to the standard are available. A utility that has 100% of its supply for Washington customers met by its own generation or by contracted generation is exempt from this requirement until its resources are no longer sufficient to serve at least 95% of its forecasted need. A small utility that purchases all of its supply from the Bonneville Power Administration (BPA) is exempt for any year that BPA does not offer resources for contract that would allow the utility to meet this requirement.

The Department of Community, Trade, and Economic Development (DCTED) must establish, through agency rules, reporting procedures and must establish criteria for alternative resources and conservation and efficiency resources. For utilities under its jurisdiction, the Washington Utilities and Transportation Commission (WUTC) will implement the diversity standard and reporting requirments.

By March 1, 2003, public and private utilities must begin reporting their activities undertaken to achieve the 5 percent requirement. Any direct service industrial customer of BPA that takes the tax credits or deferrals provided in HB 1404 or SB 5539 must comply with the standard for use of diverse resources.

By July 1, 2002, the DCTED shall present to the Governor and the Legislature, a resource credit and credit trading program to assist utilities and direct service industrial customers in meeting the resource diversity standard.

By July 1, 2007, and again on July 1, 2012, the DCTED and the WUTC must report to the Governor and the Legislature on the manner and the success utilities have had in meeting the standard in the previous 5 years.

#### Reducing peak demand

By January 1, 2003, electric utilities must complete a feasability study of ways to reduce daily peak demand by 3 percent. The studies shall consider use of consumer information on cost of electricity during different periods of the day, use of smart meter technology, and other energy management systems as ways of reducing peak demand.

#### Tax exemptions and deductions

Retail sales and use tax exemptions and a deduction from the public utility tax are provided for purchases of smart metering technology by electric utilities. Smart metering technology is defined as meters or other equipment that provide two-way communication between an electric utility and a customer's meter or electric appliances and that will enable the utility to charge different rates at different times of the day or to physically reduce demand for electricity.

The exemption from retail sales and use taxes applies to purchases made by electric utilities after July 1, 2003 (and until June 30, 2007). The exemption applies to the first \$50 of purchase for each customer to be served.

Until June 30, 2003, for the purposes of the public utility tax, the deduction is provided for purchase amounts of up to \$100 per customer served for smart metering technology. The deduction is contingent upon a certification from the Utilities and Transportation Commission that as of July 1, 2001, the utility had installed smart metering technology for at least 30 percent of its customers. The deduction only applies to amounts spent during a calendar year for customers served by smart metering technology that are in addition to the customers served by smart metering technology in the previous calendar year.

**Appropriation:** None.

**Fiscal Note:** Requested February 16, 2001.

Effective Date: Ninety days after adjournment of session in which bill is passed.