Washington State
House of Representatives
Office of Program Research

BILL ANALYSIS

Technology, Telecommunications & Energy Committee

HB 2333

Brief Description: Concerning energy efficiency and renewable energy standards.

Sponsors: Representatives Hudgins, Schual-Berke, O'Brien, Upthegrove, Wood, Ruderman, Chase, Murray, Sullivan, Hunt, Simpson, G., Haigh and Morrell.

Brief Summary of Bill

- Establishes an energy efficiency standard that becomes effective in 2006 for electric utilities (other than small electric utilities) and electric customers who purchase from the market.
- Establishes a renewable energy standard that becomes effective in 2010 for electric utilities (other than small electric utilities) and electric customers who purchase from the market.

Hearing Date: 1/14/04

Staff: Pam Madson (786-7166).

Background:

In Washington, most of the electricity sold to retail customers is generated by hydroelectric power. According to the state's fuel mix disclosure report using 2002 actual data, hydroelectric power accounts for 71.6 percent of electricity sold; coal represents 13.5 percent; nuclear power supplies 5 percent; cogeneration 5.1 percent, natural gas 3.4 percent. Non-hydro renewable resources such as wind, landfill gas, or biomass represents 1.3 percent.

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.

The Bonneville Power Administration (BPA) sells wholesale electric power to utilities for resale generated by the federal hydroelectric dams that are part of the Federal Columbia River Power

System, a nuclear facility and other nonfederal power plants. Some large industrial users of electricity purchase some of their electric power on the open market.

Beginning January 1, 2002, all electric utilities (other than small electric utilities) had to offer their customers an option to purchase electricity generated using alternative energy resources. This was a voluntary approach to encouraging the use and development of electricity generation using a mix of renewable resources. The Department of Community, Trade, and Economic Development (DCTED) and the Utilities and Transportation Commission must report annually on the products offered to customers, customer participation, and the investments made by each utility in qualifying alternative energy resources.

Though the Pacific Northwest has had some of the most successful conservation and research programs in the country, the history of investment in conservation and energy efficiency is not one of stable, consistent investment. Investment in energy efficiency in Washington peaked in 1993 at approximately $155 million and declined to an estimated $44 million in 1998. A report from the Northwest Power and Conservation Council released in early 2003 on energy conservation indicates that 2001 was the largest annual development of conservation since 1993. About $150 million was spent in new energy conservation activities and the region achieved energy savings of about 150 megawatts.

The Northwest Energy Efficiency Alliance is a non-profit group that supports regional programs to make affordable, energy-efficient products and services available in the marketplace.

Some utilities offer reduced rates or discounted charges to low-income customers. Assistance to low-income energy customers is also provided through a federal block-grant program , known as LIHEAP (Low-Income Home Energy Assistance Program), that allocates funds to the states. This program is administered by the DCTED. The DCTED also administers a weatherization program to reduce the cost of housing for low-income households by applying energy efficiency measures to a home.

Summary of Bill:

An energy efficiency standard and a renewable energy standard are established that apply to public and private electric utilities (except small utilities) and customers who purchase electricity from the market. The energy efficiency standard is effective beginning in 2006 and the renewable energy standard is effective beginning in 2010.

Energy efficiency standard

Under the energy efficiency standard, electric utilities are directed to produce energy savings each year. The energy savings targets are addressed in phases.

- Beginning in 2006 through 2009, the annual target is .75 percent of the utilities retail load using 2005 as the base year. At the end of 2009, the total energy saved from conservation programs compared to the preceding five years must be at least 3.75 percent of each utility's 2005 retail load.
- For the three year period, 2010 through 2012, the annual target is .85 percent of the utilities retail load using 2009 as the base year. During this three year period, the total energy saved from conservation programs must be 2.55 percent.

- For each three year period thereafter, the annual target is .85 percent with a total of 2.55 percent over that time, using the retail load for the year prior to the three year period as the base year.

Utilities can meet the energy efficiency standard using new activities and receiving credits for participation in other programs. Five percent of the standard must be met with low-income efficiency services unless the utility can show that this level of low-income conservation opportunities do not exist in its service territory.

Utilities may also meet the energy efficiency standard by counting conservation for which it receives credit or funding from BPA conservation programs. Contributions to the Northwest Energy Efficiency Alliance either directly or through BPA may account for up to 20 percent of the annual energy efficiency standard. Up to 15 percent of a utility's or market customer's annual energy efficiency standard may be met using high-efficiency co-generation.

Conservation programs in a utility's portfolio must be cost-effective. A utility may demonstrate that it is unable to meet the standard because of a lack of sufficient opportunities to acquire conservation and petition to apply a lower standard.

Renewable energy standard

Under the renewable energy standard, electric utilities are directed to incrementally increase the percentage of eligible renewable resources used to generate electricity to serve their retail electric load. The renewable energy standard is increased in phases.

- For the five year period beginning in 2010 through 2014, each electric utility must use electricity generated from renewable resources or renewable energy credits to serve at least 5 percent of its annual retail load.
- For the next eight year period ending in 2022, the percentage of the annual retail load supplied by electricity generated using renewable resources or renewable energy credits increases to at least 10 percent.
- For 2023 and beyond, the goal is at least 15 percent.

Renewable resources include water, wind, solar, geothermal, landfill gas and gas from a sewage treatment plant, biomass from animal waste, solid organic fuels from wood, forest residue, or energy crops, and wave or tidal power. Not all electric generation using renewable resources is eligible to meet the standard. Resources are limited by date of operation or upgrade for a facility and, in some cases, its geographic location.

An electric utility may meet the renewable energy standard by counting electricity from renewable resources for which it receives credit under BPA conservation and renewable programs and from renewable resources that are part of the BPA electricity portfolio. An electric utility may not include electricity generated from renewable resources provided to customers through optional pricing programs (green options programs). However, a utility may discontinue compliance with the green options program if it acquires sufficient renewable resource generation to meet five percent of its retail load.

A utility or a market customer may receive enhance credit for early acquisition of renewable resources located in Washington and for renewable resources acquired from facilities constructed using apprenticeship programs.

If an electric utility is unable to meet its goal using renewable resources or renewable energy credits costing $45 per MW hour or less, it may petition to meet a lower standard. The cost cap of $45 per MW hour is adjusted annually.

Electricity generated by a utility or market customer through distributed generation used to serve the customer's electricity needs may count towards meeting both standards.

Market customers

Electricity customers who purchase directly from the market must meet the energy efficiency standard and the renewable energy standard within their facilities. For market customers, only that portion of their electricity needs not provided by a utility is subject to the two standards.

In determining the amount of conservation and renewable resources necessary to meet the standard, market customers must use their most recent consumption data for that portion of their electricity needs not met by a retail utility. This information is supplied annually to the DCTED and is not subject to the Public Disclosure Law.

Market customers must obtain an independent audit of energy savings from conservation installed in their facilities. If the standard cannot be met, a market customer may petition the DCTED to meet a lesser standard.

Electricity or efficiency from resources used by a utility or market customer to meet a federally legislated standard may be used to meet both standards but not electricity used to meet a standard established through legislation in another state.

Compliance and monitoring

The DCTED, along with stakeholders and the Utilities and Transportation Commission (UTC), must develop criteria to determine cost-effective conservation, develop a definition of high-efficiency cogeneration that includes technological improvements over time, establish annual goals for acquisition of renewable resources, and select an existing system of renewable energy credits.

Utilities and market customers must demonstrate progress toward meeting the two standards by June 2007. By June 2010, and annually thereafter, they must demonstrate compliance with the standards. By December 2010, and biennially thereafter, the DCTED and the UTC must report to the Legislature on compliance with the standards. The standards will be reviewed by January 2016.

Appropriation: None.

Fiscal Note: Requested on January 13, 2004.

Effective Date: The bill takes effect 90 days after adjournment of session in which bill is passed.