Washington State House of Representatives Office of Program Research

BILL ANALYSIS

Technology, Energy & Communications Committee

HB 1059

Brief Description: Concerning energy efficiency and renewable energy standards.

Sponsors: Representatives Hudgins, Upthegrove, Kenney, Haigh, Kagi, Morris, McIntire, Morrell and Chase; by request of Governor Locke.

Brief Summary of Bill

- Requires electric utilities to develop integrated resource plans that describe the mix of generating resources and improvements in efficient use of electricity to meet current and future needs at the lowest reasonable cost to ratepayers.
- Establishes an energy efficiency standard that becomes effective in 2007 for electric
 utilities, other than small electric utilities, and full requirements customers of Bonneville
 Power Administration.
- Establishes a renewable energy standard that becomes effective in 2010 for electric utilities, other than small electric utilities, and full requirements customers of Bonneville Power Administration.

Hearing Date: 3/1/05

Staff: Sarah Dylag (786-7109).

Background:

In Washington, most of the electricity sold to retail customers is generated by hydroelectric power. According to the state's 2004 fuel mix disclosure report using 2003 electricity production data, hydroelectric power accounts for 66.6 percent of electricity sold; coal represents 17.7 percent; nuclear power supplies 4.6 percent; and natural gas 9.8 percent. Non-hydro renewable resources such as wind, landfill gas, or biomass represent 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.

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 (UTC) must report annually on the products offered to customers, customer participation, and the investments made by each utility in qualifying alternative energy resources.

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:

Integrated Resource Plans

All electric utilities are required to develop integrated resource plans that describe the mix of generating resources and improvements in efficient use of electricity to meet current and future needs at the lowest reasonable cost to its ratepayers. The investor-owned utilities must submit plans to the UTC and the consumer-owned utilities must provide a copy of the plan to the DCTED. Consumer-owned utilities that are full requirements customers of BPA are exempt from this requirement.

Energy Efficiency Standard

An energy efficiency standard is established and applies 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 2007.

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 2007 through 2010, the annual target is 0.75 percent of the utilities retail load using 2006 as the base year. At the end of 2010, the total energy saved from conservation programs compared to the preceding four years must be at least 3 percent of each utility's 2005 retail load;
- For the three year period, 2011 through 2013, the annual target is 0.85 percent of the utility's retail load using 2010 as the base year. During this three year period, the total energy saved from conservation programs must be 2.55 percent; and
- For each three year period thereafter, the annual target is 0.85 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.

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.

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

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

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 2011 through the end of 2015, 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 2023, 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 2024 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.

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

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.

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

Electricity or efficiency from resources used by a utility to meet a federally legislated standard may be used to meet the 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 UTC, must develop criteria to determine costeffective 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 must demonstrate progress toward meeting the two standards by June 2008. By June 2011, and annually thereafter, they must demonstrate compliance with the standards. By December 2011, 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 2017.

Appropriation: None.

Fiscal Note: Available.

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