
**Technology, Energy & Communications
Committee**

ESSB 5840

Brief Description: Modifying the energy independence act.

Sponsors: Senate Committee on Environment, Water & Energy (originally sponsored by Senators Marr, Honeyford, Rockefeller, Holmquist, Hatfield, Parlette, Ranker, Morton, Sheldon, Jarrett, Delvin and Hewitt).

Brief Summary of Engrossed Substitute Bill

- Modifies the renewable resources and energy conservation requirements of the Energy Independence Act.
- Increases the amount of renewable resources that certain electric utilities must use and expands the geographic region from which they may be derived.
- Allows for additional sources of renewable resources to qualify as an eligible renewable resource.
- Provides a renewable resources target compliance mechanism for low-load growth utilities.
- Directs the Utilities and Transportation Commission and the Department of Community, Trade and Economic Development to adopt rules to implement the Energy Independence Act.

Hearing Date: 3/25/09

Staff: Scott Richards (786-7156)

Background:

The Energy Independence Act.

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

In 2006 the voters approved the Energy Independence Act (Initiative 937). Initiative 937 requires certain electric utilities with 25,000 or more customers to meet targets for the use of renewable energy resources and energy conservation.

Renewable Resources Targets.

Each qualifying utility must use eligible renewable resources or acquire equivalent renewable energy credits, or a combination of both, to meet the following annual targets:

- at least 3 percent of its load by January 1, 2012, and each year thereafter through December 31, 2015;
- at least 9 percent of its load by January 1, 2016, and each year thereafter through December 31, 2019; and
- at least 15 percent of its load by January 1, 2020, and each year thereafter.

"Load" means the amount of kilowatt-hours of electricity delivered in the most recently completed year by a qualifying utility to its Washington retail customers.

"Eligible renewable resource" includes: (1) wind; (2) solar; (3) geothermal energy; (4) landfill and sewage gas; (5) wave and tidal power; and (6) certain biomass and biodiesel fuels. Electricity produced from an eligible renewable resource must be generated in a facility that started operating after March 31, 1999. The facility must either be located in the Pacific Northwest or the electricity from the facility must be delivered into the state on a real-time basis. Incremental electricity produced from efficiency improvements at hydropower facilities owned by qualifying utilities is also an eligible renewable resource if the improvements were completed after March 31, 1999.

Additional credit toward meeting the targets is provided for investments in distributed generation facilities and for investments in facilities that use state-approved apprenticeship programs during construction. Qualifying utilities may count distributed generation at double the facility's output and the use of apprenticeship programs at one and two-tenths times the renewable resources or renewable energy credit's base value. "Distributed generation" means an eligible renewable resource where the generation facility or any integrated cluster of such facilities has a generating capacity of not more than five megawatts.

A "renewable energy credit" is defined as a tradable certificate of proof of at least one megawatt hour of an eligible renewable resource. The credits can be bought and sold as a commodity in the energy marketplace. The initiative requires a renewable energy credit to be verified by a tracking system selected by the Department of Community, Trade and Economic Development (CTED).

Energy Conservation Assessments and Targets.

Each qualifying electric utility must pursue all available conservation that is cost-effective, reliable, and feasible. By January 1, 2010, each qualifying utility must assess the conservation it can achieve through 2019, and update the assessments every two years for the next ten-year period. Beginning January 2010, each qualifying utility must meet biennial conservation targets that are consistent with its conservation assessments. In meeting its target, a qualifying utility may count certain types of customer-owned and operated high-efficiency cogeneration facilities.

"High-efficiency cogeneration" means the sequential production of electricity and useful thermal energy from a common fuel source where, under normal operating conditions, the facility has a useful thermal energy output of no less than 33 percent of the total energy output.

Pacific Northwest Electric Power and Conservation Planning Council (Council).

The Council was established in the federal Northwest Power Act of 1980. The governors of Washington, Oregon, Idaho, and Montana each appoint two members to the Council. Among its duties, the Council must develop a power plan at least every five years to meet the region's electricity needs. Initiative 937 requires qualifying utilities to use methodologies consistent with the Council's most recent power plan when calculating their achievable cost-effective conservation potential. The Council is expected to release its sixth power plan in August 2009.

Western Electricity Coordinating Council (WECC).

The WECC is a regional electric reliability council that coordinates and ensures the reliability of the Western Interconnection Bulk Power System. Its membership includes transmission operators, utilities, utility customers, and state and provincial regulators. The WECC territory covers the provinces of Alberta and British Columbia, the northern portion of Baja California, Mexico, and all or portions of the 14 western states.

Summary of Bill:

Declaration of Policy.

It is declared that the policy of the state is to recognize and promote the use of low-cost renewable hydroelectric generation to firm, shape, and integrate other renewable energy resources into the northwestern electric grid for delivery to Washington residents.

Renewable Resources Target.

Each qualifying utility must use eligible renewable resources, acquire equivalent renewable energy credits, or use up to 25 percent of conservation achieved in excess of a biennial acquisition target, or a combination of these options, to meet the following annual targets:

- at least 3 percent of its load by January 1, 2012, and each year thereafter through December 31, 2013;
- at least 4 percent of its load by January 1, 2014, and each year thereafter through December 31, 2015;
- at least 10 percent of its load by January 1, 2016, and each year thereafter through December 31, 2019;
- at least 16 percent of its load by January 1, 2020, and each year thereafter through December 31, 2024; and
- at least 20 percent of its load by January 1, 2025, and each year thereafter.

Expansion of Geographic Region.

The geographic region in which each qualifying utility may generate or derive eligible renewable resources and renewable energy credits is expanded from the Pacific Northwest to the WECC.

Expansion of Eligible Renewable Resources.

Incremental electricity produced as a result of efficiency improvements completed after March 31, 1999, to hydroelectric generation facilities located in the Pacific Northwest may be counted

as an eligible renewable resource. Hydroelectric generation in water supply pipes located in the Pacific Northwest is also eligible. Electricity from existing hydroelectric generation facilities located in Washington with a rated capacity of 30 megawatts or less and owned by a qualifying utility or joint operating agency is included as an eligible renewable resource. No more than 25 percent of electricity from a biomass energy powered generation facility located in Washington that commenced operation before March 31, 1999, is considered an eligible renewable resource.

Non-Power Attributes of Renewable Resources.

For an anaerobic digester, its non-power attributes may be separated into avoided emissions of carbon dioxide, and other greenhouse gases, and into renewable energy credits.

Renewable Resources.

The following are added to the definition of "renewable resources": (1) by-products of pulping or wood manufacturing processes located in Washington that are not derived from old growth forests, including but not limited to bark, wood chips, sawdust, and lignin in spent pulping liquors; (2) wooden demolition or construction debris; (3) black liquors derived from algae and other sources; and (4) biomass energy based on food waste, yard waste, and biosolids. In addition, the prohibition against using biodiesel fuel derived from crops on land cleared from "first growth forests" is removed.

Compliance with Renewable Resource Targets for Low-Load Growth Utilities.

A qualifying utility is considered in compliance with an annual renewable resource target if: (1) in any given target year its load growth, measured as load served in the target year compared to the utility's annual average load served in 2010 and 2011, is less than the renewable resource target for that year; and (2) the utility meets 100 percent of any increase in load for that target year with eligible renewable resources or renewable energy credits.

Renewable Energy Credits.

Renewable resource target requirements may be met for any given target year with renewable energy credits produced during that year, the preceding year, or the subsequent year. Qualifying utilities may purchase or contract for purchase renewable energy credits in advance of or throughout the target year, the preceding year, or the subsequent year for meeting the requirements of this section.

Limiting the Use of Purchased Incremental Hydroelectric Power from the Bonneville Power Administration.

A qualifying utility may not count efficiency improvements to hydroelectric generation facilities whose energy output is marketed by the Bonneville Power Administration that is attributable to any other utility other than the qualifying utility.

Distributed Generation.

A qualifying utility that acquires solar energy may count that acquisition at six times its base value where the energy is produced using solar inverters and modules manufactured in Washington.

Reporting Requirements for Meeting the Eligible Renewable Acquisition Targets.

A qualifying utility that is an investor-owned utility must submit compliance reports to the Washington Utilities and Transportation Commission by June 1, 2014, and annually thereafter.

All other qualifying utilities must submit their determinations of compliance to the State Auditor by June 1, 2014, and annually thereafter. A qualifying utility electing to demonstrate an alternative compliance with a target must include in its annual report relevant data to demonstrate its compliance.

Energy Conservation Assessment and Targets.

By January 1, 2010, each qualifying utility must establish and make publicly available a biennial acquisition target for cost-effective conservation consistent with its identification of achievable opportunities, and meet that target during the subsequent two-year period. At a minimum, each biennial acquisition target must be no lower than the qualifying utility's pro rata share for that two-year period of its cost-effective conservation potential for the subsequent 10-year period. A qualifying utility may not use incremental electricity produced as a result of efficiency improvements to hydroelectric generation facilities to meet its biennial conservation acquisition target if the improvements were used to meet its renewable resource targets.

High-Efficiency Cogeneration.

In meeting its conservation acquisition targets, a qualifying utility may count high-efficiency cogeneration owned and used by a retail electric customer, if the cogeneration facility is designed to have a projected overall thermal conversion efficiency of at least 70 percent. "Overall thermal conversion efficiency" means the output of electricity, plus usable heat, divided by fuel input. The reduction in load due to high-efficiency cogeneration must be counted towards meeting the biennial conservation target in the same manner as other production conservation savings.

Rulemaking.

Rules implementing Initiative 937 must be adopted by June 30, 2010. Within six months of the adoption of the Northwest Electric Power and Conservation Council's (Council) Regional Power Plan, the Department of Community, Trade and Economic Development (CTED) and the Utilities and Transportation Commission (UTC) must start a rulemaking process. In the process, CTED and the UTC must consider adopting any changes in Council methodologies that would affect a qualifying utility's conservation potential. Any adopted rules must be applied to the next biennial target that begins at least six months after the adoption date of the rules.

Reporting Requirements.

By December 1, 2009, CTED must report to the Legislature its recommendations on how the state may recognize and promote the use of hydroelectric power to integrate other renewable energy resources. By December 1, 2010, the Joint Legislative Audit and Review Committee must evaluate the feed-in tariff program proposed in Substitute House Bill 1086 (2009).

Appropriation: None.

Fiscal Note: Available.

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