

HOUSE BILL REPORT

ESSB 5840

As Reported by House Committee On:
Technology, Energy & Communications

Title: An act relating to the energy independence act.

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 History:

Committee Activity:

Technology, Energy & Communications: 3/25/09, 3/26/09 [DPA].

**Brief Summary of Engrossed Substitute Bill
(As Amended by House)**

- Modifies the renewable resources and energy conservation requirements of the Energy Independence Act (Initiative 937).
- 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 (CTED) to adopt rules to implement Initiative 937.
- Directs the CTED to make recommendations on how low-cost hydroelectric generation may be used to firm, shape, and integrate renewable energy resources into the Northwestern electric grid.

HOUSE COMMITTEE ON TECHNOLOGY, ENERGY & COMMUNICATIONS

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.

Majority Report: Do pass as amended. Signed by 12 members: Representatives McCoy, Chair; Eddy, Vice Chair; Crouse, Ranking Minority Member; Carlyle, Condotta, DeBolt, Finn, Hasegawa, Hudgins, McCune, Takko and Van De Wege.

Minority Report: Do not pass. Signed by 3 members: Representatives Haler, Assistant Ranking Minority Member; Herrera and Jacks.

Staff: Scott Richards (786-7156)

Background:

The Energy Independence Act.

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 10-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.

The Pacific Northwest Electric Power and Conservation Planning Council (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.

The Western Electricity Coordinating Council (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 14 western states.

Summary of Amended Bill:

Renewable Resources Target.

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, 2013;

- at least 10.25 percent of its load by January 1, 2016, and each year thereafter through December 31, 2019; and
- at least 16.25 percent of its load by January 1, 2020, and each year thereafter through December 31, 2024.

It is the goal of the state for each qualifying utility to use eligible renewable resources or acquire equivalent renewable energy credits, or a combination of both, to meet an annual renewable resource goal of 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 owned by a qualifying utility and located in the Pacific Northwest may be counted as an eligible renewable resource, where the additional generation in either case does not result in new water diversions or an increase in water storage. Also included as an eligible renewable resource is the incremental electricity produced as a result of efficiency improvements completed after March 31, 1999, to hydroelectric generation projects whose energy output is marketed by the Bonneville Power Administration (BPA), where the additional generation does not result in new water diversions or an increase in the amount of water storage. Hydroelectric generation in water supply pipes located in the Pacific Northwest is also eligible.

Biomass Energy.

The following types of electricity are considered eligible renewable resources:

- electricity from a biomass energy powered generation facility owned by a qualifying utility and located in Washington as of the effective date of the act;
- electricity from a biomass energy powered generation facility located in Washington that commenced operation after March 31, 1999; or
- a maximum of 25 percent of the electricity from a biomass energy powered generation facility located in Washington and in operation as of March 31, 1999, that is not owned by a qualifying utility and is delivered to a qualifying utility.

"Biomass energy" means: (1) byproducts of pulping and wood manufacturing processes; (2) animal waste; (3) solid organic fuels from wood; (4) forest or field residues; (5) wooden demolition or construction debris; (6) food waste; (7) liquors derived from algae and other sources; (8) dedicated energy crops; (9) biosolids; and (10) yard waste. Biomass energy does not include wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenic, wood from old growth forests, or municipal solid waste.

Renewable Resources.

The prohibition against using biodiesel fuel derived from crops on land cleared from "first growth forests" is removed. The definition of "renewable resources" is reorganized so that the specific items that qualify as biomass energy are provided in a separate definition.

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.

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

A qualifying utility with annual sales of less than two million megawatt-hours 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.

A qualifying utility may use renewable energy credits from an eligible renewable resource owned in whole or in part by the utility if the credits were generated within three years prior to the year for which the credits are applied to its annual renewable resource target. The renewable energy credits shall not be transferred or sold to another entity and shall be retired by the qualifying utility if not used to meet the qualifying utility's annual renewable resource target.

Limiting the Use of Purchased Incremental Hydroelectric Power from the BPA.

A qualifying utility may not count efficiency improvements to hydroelectric generation facilities whose energy output is marketed by the BPA 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 four times its base value and six times its base value if 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 UTC 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 CTED and the UTC must start a rulemaking process. In the process, the CTED and the UTC must consider adopting any changes in the Council's 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, the CTED, within existing resources, must report to the Legislature its recommendations on how the use of hydroelectric power may be used to firm, shape, and integrate other renewable energy resources.

Amended Bill Compared to Original Bill:

Declaration of Policy.

The declaration of policy is removed that indicates that it is 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.

The striking amendment makes the following changes to the renewable resource targets: (1) it removes the provision that allows a qualifying utility to use up to 25 percent of its biennial acquisition of conservation in excess of its conservation target to meet its renewable resource targets; (2) it removes the 2014 renewable resource target of 4 percent; and (3) it specifies that the 2020 renewable resource target of 20 percent is a goal rather than an additional target.

Expansion of Eligible Renewable Resources.

The striking amendment restores the provision that hydroelectric generation projects must be owned by a qualifying utility for incremental electricity produced as a result of efficiency improvements to be considered an eligible renewable resource.

The striking amendment allows as an eligible renewable resource incremental electricity produced as a result of efficiency improvements completed after March 31, 1999, to hydroelectric generation projects whose energy output is marketed by the BPA where the additional generation does not result in new water diversions or an increase in the amount of water storage.

The striking amendment removes as an eligible renewable resource 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.

Renewable Resources.

The definition of "renewable resources" is modified. The prohibition against using biodiesel fuel derived from crops on land cleared from "first growth forests" is removed. The types of fuels that qualify as biomass energy are removed from the definition of renewable resources and included in a separate definition of biomass energy.

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

A qualifying utility must have annual sales of less than two million megawatt-hours in order to be able to comply with the renewable resource target requirements using a low-load growth methodology.

Renewable Energy Credits.

A qualifying utility may use renewable energy credits from an eligible renewable resource owned in whole or in part by the utility if the credits were generated within three years prior to the year for which the credits are applied to its annual renewable resource target. The renewable energy credits shall not be transferred or sold to another entity and shall be retired by the qualifying utility if not used to meet the qualifying utility's annual renewable resource target.

Distributed Generation.

A qualifying utility that acquires solar energy may count that acquisition at four times its base value.

Reporting Requirements.

The CTED must use existing resources to report to the Legislature its recommendations on how low-cost hydroelectric power may be used to firm, shape, and integrate renewable energy resources. The Joint Legislative Audit and Review Committee evaluation of a feed-in tariff program based on Substitute House Bill 1086 is removed.

The striking amendment makes a technical change.

Appropriation: None.

Fiscal Note: Available.

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

Staff Summary of Public Testimony:

(In support) Like any initiative, there are unintended policy consequences and costs. It is for that reason that the Legislature revises citizen initiatives after two years. Initiatives do have consequences that need to be addressed. This striking amendment seeks to strike a balance on critical questions. The striking amendment achieves two objectives: (1) it preserves the spirit of Initiative 937; and (2) it recognizes the cost impact on consumers that must be mitigated, especially under current economic conditions.

Expanding the geographic region to the Western Electricity Coordinating Council (WECC) will allow utilities to acquire new renewable energy and renewable energy credits and manage costs better. By expanding the definition of biomass energy, it will provide a practical incentive for pulp and paper manufacturers to invest in new biomass energy generation technology. The inclusion of 25 percent of pre-1999 biomass energy generation that counts toward the renewable resource targets will benefit pulp and paper industry employers who are seeking to stay competitive. The striking amendment will help retain pulp and paper mills and family-wage jobs in the state. While there are some winners and losers relating to which biomass energy facilities qualify as an eligible renewable resource, the striking amendment helps keep pulp and paper jobs and producers operating in the state. The striking amendment is an improvement in that it establishes a goal of 20 percent renewable resources by 2020, rather than creating a new renewable resource target.

(In support with amendments) The point of Initiative 937 is to address the 25 percent of our power that does not come from hydropower. No one wants to see small utilities forced to give up their hydropower to meet the renewable resource requirement. However, it is important that the non-renewable part of a utility's portfolio be offset by increased renewable purchases whether they have load growth or not.

(In support with concerns) All utilities should be able to use the low-load growth compliance provision rather than those utilities with annual sales under two million megawatt-hours. The striking amendment does not make it clear why some utilities may qualify to use the low-load growth method of compliance and others may not. Conservation should be the first policy objective of the state. The striking amendment does not allow qualifying utilities to use conservation in excess of its conservation targets to achieve its renewable resource targets. The striking amendment discourages conservation, penalizes hydropower, and will result in Washington utilities sending cheap hydropower to California at the expense of utility ratepayers. Existing hydropower under 30 megawatts should be allowed to count toward renewable resource targets.

(With concerns) Some of the changes proposed in the striking amendment would weaken market conditions by expanding the pool of resources that would qualify as renewable energy without a corresponding increase in the renewable energy targets. If the renewable resource target requirements are weakened through Engrossed Substitute Senate Bill (ESSB 5840) and the sales and use tax exemption under consideration this session is allowed to expire, then renewable energy investment and development in the state will be significantly hindered.

The Legislature should consider these two bills in tandem. It is also essential to pass the sales and use tax incentive because if it isn't passed this year, it will be the policy of the state to provide tax incentives of \$33 million a year for the coal and oil industry, but not for renewable energy.

Wind companies developing projects in the Northwest look closely at state market and regulatory conditions, and make investment decisions based on the best conditions for their projects. It is difficult to keep the business case alive in Washington without a sales and use tax exemption and reductions in Initiative 937.

The striking amendment is a significant improvement to ESSB 5840 because it only reduces new renewable resource development in 2020 by 9 percent to 14 percent, rather than the 62 percent to 88 percent as proposed in the underlying bill. However, there is concern that the striking amendment, which allows a maximum of 25 percent of the electricity from an existing biomass energy generation resources facility not owned by a qualifying utility to count toward the renewable resource targets, is not compensated by a corresponding increase of .25 percent in the renewable resource target.

The original law has a cost-cap component to it that protects utility customers from excessive costs associated with Initiative 937. To date, Initiative 937 has already helped to create jobs, given additional financial resources to counties in order to provide essential services, and provided farmers with an additional income that helps them stay on the farm.

The bill that eventually passes the Legislature should allow utilities to use excess conservation to meet the renewable resource targets. It would give utilities an additional tool to meet required Initiative 937 standards, save ratepayers millions of dollars, and fix an unintended technical consequence in Initiative 937 that created the disincentive for utilities to acquire additional conservation.

There are concerns about the study involving the use of hydropower to firm, shape, and integrate renewable resources. The language does not include the environmental cost of hydropower, the variability of climate conditions and the concerns about the various other costs of hydropower.

The seemingly small increase of the renewable resource target by .25 percent will cost utilities millions of dollars to achieve compliance with Initiative 937. Utilities should be able to apply renewable energy credits relating to the renewable resource facilities they own for up to three years and apply the credits towards their renewable resource targets. This will reward utilities that invested and developed in advance of the implementation date of the Initiative 937 renewable resources.

(Opposed) None.

Persons Testifying: (In support) Senator Marr, prime sponsor; Ken Johnson, Puget Sound Energy; Richard Lovely, Gray Harbor Public Utility District; Debbie Harris, Franklin County Public Utility District; Dean Sutherland, Clark County Public Utilities; Dave Andrew, Cowlitz County Public Utility District; Randy Ray, Franklin and Benton County Public Utility Districts; Kent Lopez, Washington Rural Electric Cooperative Association; Chris

McCabe, Association of Washington Business; Collins Sprague, Avista Corporation; Steve Gano, Longview Fibre; Bill Stauffacher, Northwest Pulp and Paper Association, and American Forest and Paper Association; Kevin Fullerton, Institute for Washington's Future, and Washington Renewable Farming; and Jerry Smedes, Cedar Grove Compost and Infinia Corporation.

(In support with amendments) Vincent Schwent, Spectrum Energy.

(In support with concerns) Tim Boyd, Industrial Customers of Northwest Utilities; and Tim Schellberg, Tacoma Public Utilities.

(With concerns) Kevin Lynch, Iberdola; Arlo Corwin, Horizon Wind Energy; Nancy Hirsh, Northwest Energy Coalition; Rachael Shimsak, Renewable Northwest Project; Noah Reandeau, Northwest Energy Efficiency Council; Craig Engelking, Sierra Club; Kathleen Collins, PacifiCorp; Miguel Perez-Gibson, Climate Solutions; and Clifford Traisman, Renewable Northwest Project, Washington Conservation Voters, and Washington Environmental Council.

Persons Signed In To Testify But Not Testifying: None.