

# HOUSE BILL REPORT

## ESSB 5840

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### As Passed House - Amended:

April 17, 2009

**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];  
General Government Appropriations: 4/1/09, 4/6/09 [DPA(TEC)].

#### Floor Activity

Passed House - Amended: 4/17/09, 57-40.

### 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.
- Allows for electricity from new and existing hydroelectric generation facilities to qualify as an eligible renewable resource.
- Provides an alternative renewable resource target compliance mechanism for certain 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.

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*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.*

- 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.
- Directs the CTED to conduct a study of the impacts of electricity costs on low-income families.

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## HOUSE COMMITTEE ON TECHNOLOGY, ENERGY & COMMUNICATIONS

**Majority Report:** Do pass as amended. Signed by 11 members: Representatives McCoy, Chair; Crouse, Ranking Minority Member; Carlyle, Condotta, Eddy, 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)

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## HOUSE COMMITTEE ON GENERAL GOVERNMENT APPROPRIATIONS

**Majority Report:** Do pass as amended by Committee on Technology, Energy & Communications. Signed by 12 members: Representatives Darneille, Chair; Takko, Vice Chair; McCune, Ranking Minority Member; Hinkle, Assistant Ranking Minority Member; Armstrong, Blake, Crouse, Hudgins, Kenney, Sells, Short and Van De Wege.

**Minority Report:** Do not pass. Signed by 2 members: Representatives Dunshee and Williams.

**Staff:** Steve Smith (786-7178)

### **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.

Electricity from a new or existing generation facility powered by water is permitted as an eligible renewable resource. Electricity from a hydroelectric generating facility with an installed generating capacity of five megawatts or less is an eligible renewable resource under certain conditions.

##### Biomass Energy.

Electricity from a biomass energy powered generation facility located in Washington that commenced operation before March 31, 1999, is an eligible renewable resource provided that the facility is: (1) owned by a qualifying utility; or (2) subject to a maximum of 25 percent of the electrical output delivered to a qualifying utility and it is owned by an entity other than a qualifying.

"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.

#### Distributed Generation.

The definition of "distributed generation" is modified to increase the generating capacity of an eligible renewable resource generation facility or any integrated cluster of such facilities from five megawatts to seven megawatts.

#### 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 meet its renewable resource target requirements for any given target year with renewable energy credits produced during that year, the preceding two years, or the subsequent year.

#### 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.

#### Solar Energy Multiplier.

A qualifying utility that acquires solar energy located in Washington or meeting the definition of distributed generation may count that acquisition at four times its base value, or six times its base value where the energy is produced using solar inverters and modules manufactured in Washington, provided the qualifying utility: (1) owns or has contracted for the solar energy generation and the associated renewable energy credits; or (2) has contracted to purchase the associated renewable energy credits.

### 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.

### Intraday Storage of Water.

"Intraday storage of water" is defined as the amount of water that is retained by a dam or weir over a 24-hour period that is in excess of normal stream flow.

### 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. The CTED is directed to conduct a study of the impacts of electricity costs on low-income families and by December 10, 2009, provide its recommendations to the governor and the appropriate committees of the Legislature on how the impacts of electricity costs on low-income families might be further mitigated.

**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 (Technology, Energy & Communications):**

(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.

**Staff Summary of Public Testimony (General Government Appropriations):**



(In support) Initiative 937 was a good change in the law, but like a lot of government by initiative, there are unanticipated consequences. The underlying Senate bill addresses a number of the policy issues that need to be addressed. The current language in the Technology, Energy and Communications (TEC) Committee striking amendment recognizes a tenuous agreement on how to improve Initiative 937.

(In support with concerns) Engrossed Substitute Senate Bill 5840 (ESSB 5840) weakened Initiative 937 and the TEC Committee striking amendment represents a deal negotiated between the Governor, legislative leaders, and stakeholders. The amendments before the General Government Appropriation's Committee should not be adopted. If they are adopted, this bill should die. The TEC Committee striking amendment is a bit better than current law. It provides qualifying utilities more flexibility. However, there are concerns about raising the renewable resource targets which translates into real financial impacts that will be passed along to the state's ratepayers. The TEC Committee striking amendment is a nominal improvement for industrial customers in the state. While there are inequities in this bill, there are also inequities in the underlying initiative.

(In support with amendment) Some refinement of the TEC Committee striking amendment is necessary relating to limited renewable energy credit banking by qualifying utilities. The TEC Committee striking amendment requires a qualifying utility to retire a renewable energy credit if it is not used to meet the utilities renewable resource targets and it also restricts the sale of these credits.

(With concerns) The TEC striking amendment has prohibitions on the sale of renewable energy credits by qualified utilities that need to be removed. This language would limit qualifying utilities from taking advantage of opportunities in the marketplace that have the potential to reducing the costs to utility customers. It is estimated that between 1,200 and 1,400 megawatts of renewable energy will be developed due to Initiative 937. Changes as proposed by committee amendments will have an impact on the amount of renewable energy developed and used. The proponents of Initiative 937 want the modification to the Initiative to be narrow, limiting unintended consequences and the impact on the renewable energy targets. The TEC Committee striking amendment does not allow a qualifying utility to apply energy conservation in excess of its energy conservation targets to the renewable resource targets. ESSB 5840 allowed for up to 25 percent of excess energy conservation to be applied to the renewable resource targets.

(Opposed) Initiative 937 created two classes of utilities in the state. Large utilities over 25,000 customers have to follow the renewable energy and energy conservation requirements in Initiative 937 and small utilities under 25,000 customers do not. The TEC Committee striking amendment goes one step further and creates two new classes among large utilities. There are now utilities that are allowed to use a low-load growth methodology in complying with Initiative 937 and those who are not allowed to use this methodology. Clark Public Utility District and the Tacoma Power fall into this new category that has to purchase renewable resources regardless of load growth. The result for these utilities is the purchase of power that is not needed. The fiscal impact note should be revised to reflect the increased cost of power for state and local agencies based on the changes in the TEC Committee striking amendment. The amending by the Legislature of Initiative 937 should be done fairly. The Senate version of ESSB 5840 recognized the importance of low load growth to

all utilities regardless of the size of the utility. For Clark County Public Utility District, Initiative 937 is projected to cost between \$1 million to \$3 million per year in additional costs by 2020 . These costs are passed o to customers.

**Persons Testifying** (Technology, Energy & Communications): (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 Testifying** (General Government Appropriations): (In support) Senator Marr, prime sponsor; and Al Aldrich, Cowlitz Public Utility District.

(In support with concerns) Cliff Traisman, Washington Environmental Council and Washington Conservation Voters.

(In support with amendment) Kathleen Collins, PacifiCorps.

(With concerns) Ken Johnson, Puget Sound Energy; Carrie Dolwick, Northwest Energy Coalition; Noah Reaudeau, Northwest Energy Efficiency Council; Tim Boyd, Industrial Customers of Northwest Utilities; and Chris McCabe, Association of Washington Businesses.

(Opposed) Robert Mack, Tacoma Public Utilities; and Dean Sutherland, Clark County Public Utility District.

**Persons Signed In To Testify But Not Testifying** (Technology, Energy & Communications): None.

**Persons Signed In To Testify But Not Testifying** (General Government Appropriations): None.