THE SENATE
TWENTY-FIFTH LEGISLATURE, 2009
STATE OF HAWAII

S.B. NO. 1258 S.D. 2

A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

PART I

SECTION 1. Attaining independence from our detrimental reliance on fossil fuels has been a long-standing objective for the State.

Hawaii is the most petroleum-dependent State for its energy needs. It pays the highest electricity prices in the United States, and its gasoline costs are among the highest in the country. Fuel surcharges that pass the increases in fuel costs to consumers have significantly increased the cost of over eighty per cent of the goods and services sold in Hawaii. Household fuels and utilities costs rose 36.4 per cent, from the previous year, as reflected in the Honolulu consumer price index during the second quarter of 2008. Hawaii's energy costs approach eleven per cent of its gross domestic product, whereas in most states energy costs are four per cent of gross domestic product. Between 2005 and 2008, state government consumption of electricity increased 3.9 per cent, but expenditures increased 56.8 per cent.

Reducing our oil dependence and the consequent price volatility and attaining energy security is critical. More than ninety-six per cent of petroleum in Hawaii now comes from foreign sources. Clean energy from indigenous renewable resources has the potential to provide an estimated one hundred fifty per cent of current installed electrical capacity.

On January 28, 2008, the signing of a memorandum of understanding between the State of Hawaii and the United States Department of Energy launched the Hawaii clean energy initiative. This initiative and long-term partnership between Hawaii and the United States Department of Energy is aimed at accelerating the use and development of energy efficiency and renewable energy technologies; allowing Hawaii to serve as a model and demonstration for the United States and other island communities; and developing a national partnership to accelerate system transformation, whereby the following goals are attained:

(1) Achieve a seventy per cent clean energy economy for Hawaii within a generation;

(2) Increase Hawaii's energy security;

(3) Capture economic benefits of clean energy for all levels of society;

(4) Contribute to greenhouse gas reduction;

(5) Foster and demonstrate innovation;

(6) Build the workforce of the future; and

(7) Serve as a national model.

The purpose of this Act is to provide a first step in aligning Hawaii's energy policy laws with the State's energy goals. For Hawaii to realize energy independence and economic stability, the transformation of its energy system must encompass changes to:

(1) Hawaii's policy and regulatory framework;

(2) System-level technology development and integration;

(3) Financing or capital investment; and

(4) Institutional system planning.

To enable energy efficiency and renewable energy resources to meet forty per cent of Hawaii's energy demand by 2030, the Hawaii clean energy initiative set goals for energy efficiency, renewable and indigenous electricity production, energy delivery and improvements to the electrical grid, and diversification of energy sources for transportation. The initiatives to achieve these goals were developed by the United States Department of Energy, department of business, economic development, and tourism, and members of the five Hawaii clean energy initiative working groups during 2008. This effort presents a range of

measures to reach aggressive energy goals while balancing the interests of various stakeholders.

PART II

RENEWABLE PORTFOLIO STANDARDS

SECTION 2. Section 269-91, Hawaii Revised Statutes, is amended as follows:

1. By amending its title to read:

"**§269-91** [~~,~~]**Definitions.**[~~,~~]"

2. By amending the definition of "renewable electrical energy" to read:

""Renewable electrical energy" means:

(1) Electrical energy generated using renewable energy as the source;

(2) Electrical energy savings brought about by the use of renewable displacement or off-set technologies, including solar water heating, sea-water air-conditioning district cooling systems, solar air-conditioning, and customer-sited, grid-connected renewable energy systems; provided that, beginning in 2015, electrical energy savings will not count towards the renewable portfolio standards; or

[~~+~~](3)[~~+~~]Electrical energy savings brought about by the use of energy efficiency technologies, including heat pump water heating, ice storage, ratepayer-funded energy efficiency programs, and use of rejected heat from co-generation and combined heat and power systems, excluding fossil-fueled qualifying facilities that sell electricity to electric utility companies and central station power projects[~~.~~]; provided that, beginning in 2015, electrical energy savings will not count towards the renewable portfolio standards."

3. By amending the definition of "renewable energy" to read:

""Renewable energy" means energy generated or produced utilizing the following sources:

(1) Wind;

(2) The sun;

(3) Falling water;

(4) Biogas, including landfill and sewage-based digester gas;

(5) Geothermal;

(6) Ocean water, currents, and waves;

(7) Biomass, including biomass crops, agricultural and animal residues and wastes, and [~~municipal~~] solid waste;

(8) Biofuels; and

(9) Hydrogen produced from renewable energy sources."

SECTION 3. Section 269-92, Hawaii Revised Statutes, is amended by amending subsections (a) and (b) to read as follows:

"(a) Each electric utility company that sells electricity for consumption in the State shall establish a renewable portfolio standard of:

(1) Ten per cent of its net electricity sales by December 31, 2010;

(2) Fifteen per cent of its net electricity sales by December 31, 2015; [~~and~~]

(3) [~~Twenty~~] Twenty-five per cent of its net electricity sales by December 31, 2020[~~.~~]; and

(4) Forty per cent of its net electricity sales by December 31, 2030.

(b) The public utilities commission may establish standards for each utility that prescribe what portion of the renewable portfolio standards shall be met by specific types of renewable electrical energy resources; provided that:

(1) [~~At~~] By no later than December 31, 2014, at least fifty per cent of the renewable portfolio standards shall be met by electrical energy generated using renewable energy as the source[~~:~~], and beginning January 1, 2015, one hundred per cent of the renewable portfolio standards shall be met by electrical generation from renewable energy sources;

(2) Where electrical energy is generated or displaced by a combination of renewable and nonrenewable means, the proportion attributable to the renewable means shall be credited as renewable energy; and

(3) Where fossil and renewable fuels are co-fired in the same generating unit, the unit shall be considered to generate renewable electrical energy (electricity) in direct proportion to the percentage of the total heat input value represented by the heat input value of the renewable fuels."

SECTION 4. Section 269-95, Hawaii Revised Statutes, is amended to read as follows:

"**§269-95 Renewable portfolio standards study.** The public utilities commission shall:

(1) By December 31, 2007, develop and implement a utility ratemaking structure, which may include performance-based ratemaking, to provide incentives that encourage Hawaii's electric utility companies to use cost-effective renewable energy resources found in Hawaii to meet the renewable portfolio standards established in section 269-92, while allowing for deviation from the standards in the event that the standards cannot be met in a cost-effective manner or as a result of events or circumstances, such as described in section 269-92(d), beyond the control of the utility that could not have been reasonably anticipated or ameliorated;

(2) Gather, review, and analyze empirical data to determine the extent to which any proposed utility ratemaking structure would impact electric utility companies' profit margins and to ensure that the electric utility companies' opportunity to earn a fair rate of return is not diminished;

(3) Using funds from the public utilities special fund, contract with the Hawaii natural energy institute of the University of Hawaii to conduct independent

studies to be reviewed by a panel of experts from entities such as the United States Department of Energy, National Renewable Energy Laboratory, Electric Power Research Institute, Hawaii electric utility companies, environmental groups, and other similar institutions with the required expertise. These studies shall include findings and recommendations regarding:

(A) The capability of Hawaii's electric utility companies to achieve renewable portfolio standards in a cost-effective manner and shall assess factors such as the impact on consumer rates, utility system reliability and stability, costs and availability of appropriate renewable energy resources and technologies, permitting approvals, effects on the economy, balance of trade, culture, community, environment, land and water, climate change policies, demographics, and other factors deemed appropriate by the commission; and

(B) Projected renewable portfolio standards to be set five and ten years beyond the then current standards;

(4) [~~Revise~~] Evaluate the renewable portfolio standards every five years beginning in 2013, and may revise the standards based on the best information available at the time [~~if the results of the studies conflict with~~] to determine if the renewable portfolio standards established by section 269-92[~~,~~] remain achievable; and

(5) Report its findings and revisions to the renewable portfolio standards, based on its own studies and [~~those contracted under paragraph (3),~~] other information, to the legislature no later than twenty days before the convening of the regular session of [~~2009,~~] 2014, and every five years thereafter."

PART III

NET ENERGY METERING

SECTION 5. Section 269-104, Hawaii Revised Statutes, is amended to read as follows:

"**§269-104 Additional customer-generators.** Notwithstanding section 269-102, an electric utility is not obligated to provide

net energy metering to additional customer-generators in its service area when the combined total peak generating capacity of all eligible customer-generators served by all the electric utilities in that service area furnishing net energy metering to eligible customer-generators equals .5 per cent of the system peak demand of those electric utilities; provided that the public utilities commission, by rule or order, may increase[~~, by rule or order,~~] or eliminate the limit to the allowable percentage of the electric utility's system peak demand produced from eligible customer-generators in the electric utility's service area, whereupon the electric utility will be obligated to provide net energy metering to additional eligible customer-generators in that service area [~~up to the increased percentage amount~~]."

PART IV

ENERGY RESOURCES COORDINATOR

SECTION 6. Section 196-4, Hawaii Revised Statutes, is amended to read as follows:

"**§196-4 Powers and duties.** Subject to the approval of the governor, the coordinator shall:

(1) Formulate plans, including objectives, criteria to measure accomplishment of objectives, programs through

which the objectives are to be attained, and financial requirements for the optimum development of Hawaii's energy resources;

(2) Conduct systematic analysis of existing and proposed energy resource programs, evaluate the analysis conducted by government agencies and other organizations and recommend to the governor and to the legislature programs [~~which~~] that represent the most effective allocation of resources for the development of energy sources;

(3) Formulate and recommend specific proposals, as necessary, for conserving energy and fuel, including the allocation and distribution thereof, to the governor and to the legislature;

(4) Assist public and private agencies in implementing energy conservation and related measures;

(5) Coordinate the State's energy conservation and allocation programs with [~~that~~] those of the federal government, other state governments, governments of nations with interest in common energy resources, and the political subdivisions of the State;

(6) Develop programs to encourage private and public exploration and research of alternative energy resources [~~which~~] that will benefit the State;

(7) Conduct public education programs to inform the public of the energy situation as may exist from time to time and of the government actions taken thereto;

(8) Serve as consultant to the governor, public agencies, and private industry on matters related to the acquisition, utilization, and conservation of energy resources;

(9) Contract for services when required for implementation of this chapter;

(10) Review proposed state actions [~~which~~] that the coordinator finds to have significant effect on energy consumption and report to the governor their effect on the energy conservation program, and perform [~~such~~] other services as may be required by the governor and the legislature;

(11) Prepare and submit an annual report and [~~such~~] other reports as may be requested to the governor and to the legislature on the implementation of this chapter and all matters related to energy resources; [~~and~~]

(12) Formulate a systematic process, including the development of requirements, to identify geographic areas that are rich with renewable energy resource potential that can be developed in a cost-effective and environmentally benign manner, and designate the areas as renewable energy zones;

(13) Develop and recommend incentive plans and programs to encourage the development of renewable energy resource projects within the renewable energy zones;

(14) Assist public and private agencies in identifying the utility transmission projects or infrastructure that are required to accommodate and facilitate the development of renewable energy resources;

(15) Assist public and private agencies in coordination with the department of budget and finance in accessing use of special purpose revenue bonds to finance the engineering, design, and construction of transmission projects and infrastructure that are deemed critical to the development of renewable energy resources;

(16) Develop the criteria or requirements for identifying and qualifying specific transmission projects or infrastructure that are critical to the development of

renewable energy resources, and for which the energy resources coordinator will assist in accessing the use of special purpose revenue bonds to finance the projects or infrastructure; and

[~~(12)~~] (17) Adopt rules for the administration of this chapter pursuant to chapter 91, provided that the rules shall be submitted to the legislature for review."

PART V

RENEWABLE ENERGY RESOURCES

SECTION 7. Section 209E-2, Hawaii Revised Statutes, is amended by amending the definition of "qualified business" to read as follows:

""Qualified business" means any corporation, partnership, or sole proprietorship authorized to do business in the State that is qualified under section 209E-9, subject to the state corporate or individual income tax under chapter 235, and is:

(1) Engaged in manufacturing, the wholesale sale of tangible personal property as defined in section 237-4, or a service business as defined in this chapter;

(2) Engaged in producing agricultural products where the business is a producer as defined in section 237-5, or

engaged in processing agricultural products, all or some of which were grown within an enterprise zone;

(3) Engaged in research, development, sale, or production of all types of genetically-engineered medical, agricultural, or maritime biotechnology products; or

(4) Engaged in [~~producing electric power from wind energy for sale primarily to a public utility company for resale to the public.~~] development or production of fuels or thermal energy or electrical energy from renewable resources, including:

(A) Wind;

(B) The sun;

(C) Falling water;

(D) Biogas, including landfill and sewage-based digester gas;

(E) Geothermal;

(F) Ocean water, currents, and waves;

(G) Biomass, including biomass crops, agriculture and animal residues and wastes, and solid waste;

(H) Biofuels; and

(I) Hydrogen produced from renewable energy sources."

PART VI

RENEWABLE ENERGY FACILITATOR

SECTION 8. Section 201-12.5, Hawaii Revised Statutes, is amended by amending subsection (b) to read as follows:

"(b) The renewable energy facilitator shall have the following duties:

(1) Facilitate the efficient permitting of renewable energy projects[~~.~~], including:

(A) The land parcel on which the facility is situated;

(B) Any renewable energy production structure or equipment;

(C) Any energy transmission line from the facility to a public utility's electricity system; and

(D) Any on-site infrastructure necessary for the production of electricity or biofuel from the renewable energy site;

(2) Initiate the implementation of key renewable energy projects by permitting various efficiency improvement strategies identified by the department;

(3) Administer the day-to-day coordination for renewable energy projects on behalf of the department and the

day-to-day operations of the renewable energy facility siting process established in [~~,~~]Act 207, Session Laws of Hawaii 2008[~~,~~]; and

(4) Submit periodic reports to the legislature on renewable energy facilitation activities and the progress of the renewable energy facility siting process."

PART VII

RENEWABLE ENERGY PERMITTING

SECTION 9. Section 201N-1, Hawaii Revised Statutes, is amended by amending the definition of "renewable energy facility" or "facility" to read as follows:

""Renewable energy facility" or "facility" means a new facility located in the State with the capacity to produce from renewable energy at least two hundred megawatts of electricity[~~.~~]; provided that biofuel production facilities of at least one million gallons per year and electricity production facilities with capacities between five and two hundred megawatts may apply to the coordinator for designation as renewable energy facilities, with the designation to be at the sole discretion of the coordinator. The term includes any of

the following associated with the initial permitting and construction of the facility:

(1) The land parcel on which the facility is situated;

(2) Any renewable energy production structure or equipment;

(3) Any energy transmission line from the facility to a public utility's electricity transmission or distribution system;

(4) Any on-site infrastructure; and

(5) Any on-site building, structure, other improvement, or equipment necessary for the production of electricity or biofuel from the renewable energy site, transmission of the electricity or biofuel, or any accommodation for employees of the facility."

SECTION 10. Section 201N-4, Hawaii Revised Statutes, is amended by amending subsection (g) to read as follows:

"(g) Each appropriate state and county agency shall diligently endeavor to process and approve or deny any permit in the permit plan no later than twelve months after a completed permit plan application is approved by the coordinator. If a permit is not approved or denied within twelve months after approval of a completed permit plan application, the permitting

agency, within thirty days following the twelve-month period, shall provide the coordinator with a report identifying diligent measures that are being taken by the agency to complete processing and action as soon as practicable. If no further processing and action are reported by the permitting agency within five months, the permit shall be deemed approved. If a permitting agency fails to provide [~~this~~] the report identifying diligent measures and if the permit has not been approved or denied within eighteen months following the approval of a completed permit plan application by the coordinator, the permit shall be deemed approved."

SECTION 11. There is appropriated out of the renewable energy facility siting special fund the sum of $ or so much thereof as may be necessary for fiscal year 2009-2010 and the sum of $ or so much thereof as may be necessary for fiscal year 2010-2011.

The sums appropriated shall be expended by the department of business, economic development, and tourism for the purposes of the renewable energy facility siting special fund as set forth in section 201N-11, Hawaii Revised Statutes.

PART VIII

MISCELLANEOUS

SECTION 12. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.

SECTION 13. This Act shall take effect on January 1, 2050, except that section 11 shall take effect on July 1, 2050.

Report Title:
Renewable Energy

Description:
Requires electric utilities to establish renewable portfolio standards of 40% of net energy sales by 12/31/30. By 01/01/15, requires 100% of renewable portfolio standard to be met by electrical generation from renewable sources. Expands duties of energy resources coordinator concerning development of renewable energy resources. Specifies aspect of renewable energy projects that renewable energy facilitator has duty concerning with respect to permitting. Effective 01/01/50. (SD2)