

JAN 25 2017

A BILL FOR AN ACT

RELATING TO RENEWABLE PORTFOLIO STANDARD.

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

1 SECTION 1. The purpose of this Act is to amend the
2 calculation of renewable portfolio standard to more accurately
3 reflect the percentage of renewable energy penetration in the
4 State. This amendment is being done in line with Act 97,
5 Session Laws of Hawaii 2015, which established the one hundred
6 per cent renewable portfolio standard by 2045 and the statutory
7 intent to transition the State away from imported fuels and
8 toward renewable local resources that provide a secure source of
9 affordable energy. This is accomplished by amending the
10 renewable portfolio standard calculation to be based on
11 electrical grid-connected energy generation as opposed to
12 electrical energy sales. Failure to address this accounting
13 error means that the current renewable portfolio standard
14 calculation (renewable energy divided by total electricity
15 sales) would overestimate the amount of renewable energy serving
16 Hawaii's electric utility company customers. Failure to address
17 this issue would create the incorrect public perception of the

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1 State's progress towards its one hundred per cent renewable
2 energy statutory goal.

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

5 "~~§269-91~~ ~~[+]Definitions.[+]~~ For the purposes of this
6 ~~[+]part[+]~~:

7 "Biofuels" means liquid or gaseous fuels produced from
8 organic sources such as biomass crops, agricultural residues and
9 oil crops, such as palm oil, canola oil, soybean oil, waste
10 cooking oil, grease, and food wastes, animal residues and
11 wastes, and sewage and landfill wastes.

12 "Cost-effective" means the ability to produce or purchase
13 electric energy or firm capacity, or both, from renewable energy
14 resources at or below avoided costs or as the commission
15 otherwise determines to be just and reasonable consistent with
16 the methodology set by the public utilities commission in
17 accordance with section 269-27.2.

18 "Electric utility company" means a public utility as
19 defined under section 269-1, for the production, conveyance,
20 transmission, delivery, or furnishing of power.

21 "Electric utility system" means the electric system owned
22 and operated by an electric utility company, including any non-

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1 utility owned facilities that are interconnected to the system,
2 consisting of power plants, transmission and distribution lines,
3 and related equipment for the production and delivery of
4 electric power to the public.

5 "Fuel" means fuels, whether liquid, solid, or gaseous,
6 commercially usable for energy needs, power generation, and
7 fuels manufacture, that may be manufactured, grown, produced, or
8 imported into the State or that may be exported therefrom,
9 including petroleum and petroleum products and gases; coal, coal
10 tar, vegetable ferments, and all fuel alcohols.

11 "Grid-connected" means interconnected to a Hawaii electric
12 system under a standard or rule approved by the public utilities
13 commission; provided that this shall not apply where the
14 generation is used exclusively for emergency service in case of
15 failure of the normal supply from a Hawaii utility electric
16 system. As used in this definition, "interconnection" and
17 "Hawaii electric system" have the same meaning as in section
18 269-141.

19 "Non-electric utility company" means a public utility as
20 defined under section 269-1, for the production, conveyance,
21 transmission, delivery, or furnishing of light, heat, cold,
22 water, gas, or oil.

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1 "Refinery" means any industrial plant, regardless of
2 capacity, processing crude oil feedstock and manufacturing oil
3 products.

4 "Renewable electrical energy" means:

5 (1) Electrical energy generated using renewable energy as
6 the source, and beginning January 1, 2015, includes
7 customer-sited, grid-connected renewable energy
8 generation; and

9 (2) Electrical energy savings brought about by:

10 (A) The use of renewable displacement or off-set
11 technologies, including solar water heating, sea-
12 water air-conditioning district cooling systems,
13 solar air-conditioning, and customer-sited, grid-
14 connected renewable energy systems; provided
15 that, beginning January 1, 2015, electrical
16 energy savings shall not include customer-sited,
17 grid-connected renewable-energy systems; or

18 (B) The use of energy efficiency technologies,
19 including heat pump water heating, ice storage,
20 ratepayer-funded energy efficiency programs, and
21 use of rejected heat from co-generation and
22 combined heat and power systems, excluding

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1 fossil-fueled qualifying facilities that sell
2 electricity to electric utility companies and
3 central station power projects.

4 "Renewable energy" means energy generated or produced using
5 the following sources:

- 6 (1) Wind;
- 7 (2) The sun;
- 8 (3) Falling water;
- 9 (4) Biogas, including landfill and sewage-based digester
10 gas;
- 11 (5) Geothermal;
- 12 (6) Ocean water, currents, and waves, including ocean
13 thermal energy conversion;
- 14 (7) Biomass, including biomass crops, agricultural and
15 animal residues and wastes, and municipal solid waste
16 and other solid waste;
- 17 (8) Biofuels; and
- 18 (9) Hydrogen produced from renewable energy sources.

19 "Renewable portfolio standard" [~~means the percentage of~~
20 ~~electrical energy sales that is represented by renewable~~
21 ~~electrical energy.~~] has the same meaning as described in section
22 269-92(b) and (d)."

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1 SECTION 3. Section 269-92, Hawaii Revised Statutes, is
2 amended to read as follows:

3 **"§269-92 Renewable portfolio standards.** (a) Each
4 electric utility company that sells electricity for consumption
5 in the State, or sells or provides fuel used for grid-connected
6 electrical generation in the State, shall establish a renewable
7 portfolio standard of:

- 8 (1) Ten per cent [~~of its net electricity sales~~] by
9 December 31, 2010;
- 10 (2) Fifteen per cent [~~of its net electricity sales~~] by
11 December 31, 2015;
- 12 (3) Thirty per cent [~~of its net electricity sales~~] by
13 December 31, 2020;
- 14 (4) Forty per cent [~~of its net electricity sales~~] by
15 December 31, 2030;
- 16 (5) Seventy per cent [~~of its net electricity sales~~] by
17 December 31, 2040; and
- 18 (6) One hundred per cent [~~of its net electricity sales~~] by
19 December 31, 2045.

20 (b) The renewable portfolio standard for an electric
21 utility company shall be the energy amount described in

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1 paragraph (1) divided by the energy amount described in
2 paragraph (2).

3 (1) Total annual renewable electrical energy that is grid-
4 connected to the electric utility company's electric
5 utility system; less, total annual renewable
6 electrical energy claimed by all non-electric utility
7 companies described in subsection (d)(1) that is grid-
8 connected to the electric utility company's electric
9 utility system.

10 (2) Total annual electrical energy generated that is grid-
11 connected to the electric utility company's electric
12 utility system; less, total annual electrical energy
13 claimed by all non-electric utility companies
14 described in subsection (d)(2) that is grid-connected
15 to the electric utility company's electric utility
16 system.

17 (c) Each non-electric utility company that sells
18 electricity for consumption in the State, or sells or provides
19 fuel used for grid-connected electrical generation in the State,
20 shall establish a renewable portfolio standard of:

21 (1) Fifteen per cent by December 31, 2020;

22 (2) Forty per cent by December 31, 2030;

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1 (3) Seventy per cent by December 31, 2040; and

2 (4) One hundred per cent by December 31, 2045.

3 (d) The renewable portfolio standard for a non-electric
4 utility company shall be the energy amount described in
5 paragraph (1) divided by the energy amount described in
6 paragraph (2).

7 (1) Total annual grid-connected renewable electrical
8 energy that is owned, leased, operated, or contracted
9 for by the non-electric utility company; plus, total
10 annual grid-connected renewable electrical energy from
11 fuels sold or provided by the non-electric utility
12 company to a non-utility party.

13 (2) Total annual grid-connected electrical energy
14 generation that is owned, leased, operated, or
15 contracted for by the non-electric utility company;
16 plus, total annual grid-connected electrical energy
17 generation from fuels sold or provided by the non-
18 electric utility company to a non-utility party.

19 (e) The electrical energy described in subsection (d)(1)
20 and (2) shall not include generation from grid-connected
21 generating facilities that was produced under a written contract

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1 or agreement with an electric utility company executed prior to
2 July 3, 2017.

3 (f) All grid-connected electrical energy generated must be
4 renewable electrical energy by December 31, 2045.

5 [~~(b)~~] (g) The public utilities commission may establish
6 standards for each utility that prescribe what portion of the
7 renewable portfolio standards shall be met by specific types of
8 renewable energy resources; provided that:

9 (1) Prior to January 1, 2015, at least fifty per cent of
10 the renewable portfolio standards shall be met by
11 electrical energy generated using renewable energy as
12 the source, and after December 31, 2014, the entire
13 renewable portfolio standard shall be met by
14 electrical generation from renewable energy sources;

15 (2) Beginning January 1, 2015, electrical energy savings
16 shall not count toward renewable energy portfolio
17 standards;

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

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

7 [~~e~~] (h) If the public utilities commission determines
8 that an electric utility company or non-electric utility company
9 failed to meet the renewable portfolio standard, after a hearing
10 in accordance with chapter 91, the utility shall be subject to
11 penalties to be established by the public utilities commission;
12 provided that if the commission determines that the electric
13 utility company or non-electric utility company is unable to
14 meet the renewable portfolio standards due to reasons beyond the
15 reasonable control of an electric utility company or non-
16 electric utility company, as set forth in subsection [~~d~~] (i),
17 the commission, in its discretion, may waive in whole or in part
18 any otherwise applicable penalties.

19 [~~d~~] (i) Events or circumstances that are outside of an
20 electric utility company's or non-electric utility company's
21 reasonable control may include, to the extent the event or
22 circumstance could not be reasonably foreseen and ameliorated:

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- 1 (1) Weather-related damage;
- 2 (2) Natural disasters;
- 3 (3) Mechanical or resource failure;
- 4 (4) Failure of renewable electrical energy producers to
- 5 meet contractual obligations to the electric utility
- 6 company[+] or non-electric utility company;
- 7 (5) Labor strikes or lockouts;
- 8 (6) Actions of governmental authorities that adversely
- 9 affect the generation, transmission, or distribution
- 10 of renewable electrical energy under contract to an
- 11 electric utility company[+] or non-electric utility
- 12 company;
- 13 (7) Inability to acquire sufficient renewable electrical
- 14 energy due to lapsing of tax credits related to
- 15 renewable energy development;
- 16 (8) Inability to obtain permits or land use approvals for
- 17 renewable electrical energy projects;
- 18 (9) Inability to acquire sufficient cost-effective
- 19 renewable electrical energy;
- 20 (10) Inability to acquire sufficient renewable electrical
- 21 energy to meet the renewable portfolio standard goals
- 22 beyond 2030 in a manner that is beneficial to Hawaii's

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1 economy in relation to comparable fossil fuel
2 resources;

3 (11) Substantial limitations, restrictions, or prohibitions
4 on utility renewable electrical energy projects; ~~[and]~~

5 (12) Act of war or domestic terrorism; and

6 ~~[-(12)]~~ (13) Other events and circumstances of a similar
7 nature.

8 (j) Electric generation facilities that are explicitly
9 exempted and not included in the renewable portfolio

10 calculations in this section include:

11 (1) The existing cogeneration or backup power facilities
12 that are operating as of July 3, 2017, in any refinery
13 up to the extent of the current nameplate capacity
14 that exists as of July 3, 2017, except that this
15 exemption would be removed in the event of repowering
16 of any such facility that would increase its nameplate
17 capacity;

18 (2) The existing cogeneration or backup power facilities
19 that are operating as of July 3, 2017, in any military
20 base up to the extent of the current nameplate
21 capacity that exists as of July 3, 2017; and

22 (3) Any non-grid connected electric generation facility."

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1 SECTION 4. Section 269-93, Hawaii Revised Statutes, is
2 amended to read as follows:

3 **"§269-93 Achieving portfolio standard.** (a) An electric
4 utility company and its electric utility affiliates, or a non-
5 electric utility company and its non-electric utility
6 affiliates, may aggregate their renewable portfolios to achieve
7 the renewable portfolio standard.

8 (b) If an electric utility company and its electric
9 utility affiliates, or a non-electric utility company and its
10 non-electric utility affiliates, aggregate their renewable
11 portfolios to achieve the renewable portfolio standard, the
12 public utilities commission may distribute, apportion, or
13 allocate the costs and expenses of all or any portion of the
14 respective renewable portfolios among: the electric utility
15 company, its electric utility affiliates, and their respective
16 ratepayers[~~r~~]; or the non-electric utility company, its non-
17 electric utility affiliates, and their respective ratepayers as
18 is reasonable under the circumstances.

19 (c) An electric utility company or non-electric utility
20 company may recover, through an automatic rate adjustment
21 clause, the electric utility company's or non-electric utility
22 company's revenue requirement resulting from the distribution,

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1 apportionment, or allocation of the costs and expenses of the
2 renewable portfolios of the electric utility company and its
3 electric utility affiliates[-], or the non-electric utility
4 company and its non-electric utility affiliates.

5 (d) To provide for timely recovery of the revenue
6 requirement under subsection (c), the commission may establish a
7 separate automatic rate adjustment clause, or approve the use of
8 a previously approved automatic rate adjustment clause, without
9 a rate case filing. The use of the automatic rate adjustment
10 clause to recover the revenue requirement shall be allowed to
11 continue until the revenue requirement is incorporated in rates
12 in the respective electric utility company's or non-electric
13 utility company's rate case."

14 SECTION 5. Statutory material to be repealed is bracketed
15 and stricken. New statutory material is underscored.

16 SECTION 6. This Act shall take effect upon its approval.

17

18

INTRODUCED BY:

Wm. N. White

19

BY REQUEST

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Report Title:

Renewable Portfolio Standard; Definition.

Description:

Amends the "renewable portfolio standard" calculation to more accurately reflect the amount of grid-connected renewable energy generation in Hawaii.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

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JUSTIFICATION SHEET

DEPARTMENT: Business, Economic Development, and Tourism

TITLE: A BILL FOR AN ACT RELATING TO RENEWABLE PORTFOLIO STANDARD.

PURPOSE: To more accurately reflect the percentage of renewable energy penetration in Hawaii in accordance with the State's one hundred percent renewable energy goal by 2045 by accurately applying a Renewable Portfolio Standard (RPS) to all grid-connected electrical generation.

MEANS: Amend sections 269-91, 269-92, and 269-93, Hawaii Revised Statutes.

JUSTIFICATION: In enacting Act 97, Session Laws of Hawaii 2015, the Legislature determined that Hawaii's clean energy initiative and renewable portfolio standards are essential for ensuring maximum long-term benefit to Hawaii's economy and set a goal of one hundred percent renewable energy by 2045.

To succeed in meeting this goal, an accurate method must be used to calculate the percentage of renewable energy penetration. The current method of calculating the percentage of renewable energy penetration in Hawaii is flawed and results in a misrepresentation of our State's renewable energy progress, which may erode public confidence in the RPS over time. This bill will correct the current method of calculation.

Impact on the public: None.

Impact on the department and other agencies: None.

GENERAL FUND: None.

OTHER FUNDS: None.

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PPBS PROGRAM
DESIGNATION:

BED 120.

OTHER AFFECTED
AGENCIES:

Public Utilities Commission, Consumer
Advocate, Office of Planning.

EFFECTIVE DATE:

Upon approval.