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

- 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.
- "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-

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, including petroleum and petroleum products and gases, coal, coal 9 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 generation is used exclusively for emergency service in case of 14 failure of the normal supply from a Hawaii utility electric 15 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,

transmission, delivery, or furnishing of light, heat, cold,

water, gas, or oil.

21

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:
0	(A) The use of renewable displacement or off-set
1	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
              Biomass, including biomass crops, agricultural and
         (7)
15
              animal residues and wastes, and municipal solid waste
16
              and other solid waste;
17
         (8.)
              Biofuels; and
18
              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: (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 Thirty per cent [of its net electricity sales] by (3) 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 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	(~)	Roch man alaskuis ukiliku suuruus khak salla
17	<u>(c)</u>	Each non-electric utility company that sells
18	electrici	ty for consumption in the State, or sells or provides
19	fuel used	for grid-connected electrical generation in the State,
20	shall est	ablish a renewable portfolio standard of:
21	(1)	Fifteen per cent by December 31, 2020;
22	(2)	Forty per cent by December 31, 2030;
	(4)	TOTE, POL COME DY DOCUMENT ST, 2000,

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 co	ompany 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	<u>(e)</u>	The electrical energy described in subsection (d)(1)
20	and (2) sl	nall not include generation from grid-connected
21	generatin	g facilities that was produced under a written contract

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1	or agreeme	ent with an electric utility company executed prior to
2	July 3, 20	017.
3	<u>(f)</u>	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	[(c)] (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
1	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),
17	the commission, in its discretion, may waive in whole or in part
18	any otherwise applicable penalties.
19	[(d)] <u>(i)</u> 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.

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

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	<u>(j)</u>	Electric generation facilities that are explicitly
9	<u>exempted</u>	and not included in the renewable portfolio
10	calculati	ons 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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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 [7]; or the non-electric utility company, its non-17 electric utility affiliates, and their respective ratepayers as 18 is reasonable under the circumstances. 19 An electric utility company or non-electric utility company may recover, through an automatic rate adjustment 20 21 clause, the electric utility company's or non-electric utility 22 company's revenue requirement resulting from the distribution,

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:
19	BY REQUEST
	2 2 2017

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.

HB 1040

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:

GENERAL FUND:

None.

OTHER FUNDS:

None.

PPBS PROGRAM

DESIGNATION:

BED 120.

OTHER AFFECTED

AGENCIES:

Public Utilities Commission, Consumer

Advocate, Office of Planning.

EFFECTIVE DATE:

Upon approval.