

JAN 22 2007

A BILL FOR AN ACT

RELATING TO SOLAR ENERGY.

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

1 SECTION 1. The legislature finds that Hawaii depends on
2 petroleum for about eighty per cent of its electric power needs.
3 This is a higher dependency rate than any other state in the
4 nation. This dependence makes the State extremely vulnerable to
5 any oil embargo, supply disruption, or other market dysfunction
6 beyond the control of the State. Furthermore, Hawaii's
7 continued consumption of petroleum and coal for electric power
8 production negatively impacts Hawaii's environment.

9 The legislature also finds that increased use of Hawaii's
10 abundant solar energy resource to generate solar electricity
11 would increase Hawaii's energy self-sufficiency and achieve
12 broad societal benefits, including increased energy security,
13 diminished vulnerability to oil price increases, enhanced
14 sustainability, economic development, and job creation.

15 Over the years, the legislature has worked steadily to
16 encourage the development of solar electricity in Hawaii.
17 Legislative achievements relating to solar electricity include a



1 net metering program, utility interconnection standards,
2 renewable energy technology tax credits, and a statewide
3 renewable energy portfolio standard.

4 The legislature also finds that, notwithstanding its
5 efforts, solar electricity generation in Hawaii remains
6 underdeveloped because existing incentives do not make solar
7 electricity cost-competitive with grid power, do not compensate
8 customer-generators that produce more electricity than they
9 generate, and do not reward power users, such as tax-exempt
10 state and municipal institutions, that are not able to use tax-
11 based incentives.

12 The legislature also finds that a premium feed-in tariff
13 has proven effective in nations such as Germany and Spain, by
14 dramatically increasing the rate and scale of solar electricity
15 development in those nations.

16 The purpose of this Act is to encourage the development of
17 solar electricity generation in Hawaii, promote energy self-
18 sufficiency for Hawaii, and protect Hawaii's environment by
19 establishment of a feed-in tariff that offers solar electricity
20 producers an attractive price for solar electricity sold to the
21 electric utility.



1 SECTION 2. Chapter 269, Hawaii Revised Statutes, is
2 amended by adding a new section to be appropriately designated
3 and to read as follows:

4 "§269- Feed-in tariff. (a) As used in this section:

5 "New solar electricity system" means a solar electricity
6 system placed in service after the effective date of this
7 section.

8 "Solar electricity" means electricity produced by a solar
9 electricity system from solar radiation energy.

10 "Solar electricity producer" means any person that owns,
11 controls, operates, manages, or uses a solar electricity system
12 to produce solar electricity.

13 "Solar electricity purchase agreement" means a contract or
14 tariff under which the electric utility is obliged to purchase
15 solar electricity produced by a new solar electricity system and
16 made available to the electric utility by the solar electricity
17 producer and to compensate the solar electricity producer for
18 the solar electricity provided in accordance with this section.

19 "Solar electricity system" means any identifiable facility,
20 equipment, apparatus, or the like that converts solar radiation
21 energy to electricity, including photovoltaic systems and
22 concentrating solar electric power systems.



1 (b) At the request of a solar electricity producer that
2 places a new solar electricity system in service, an electric
3 utility shall interconnect the solar electricity system to the
4 electric system of the electric utility. The requirement under
5 this subsection shall apply to the electric utility whose
6 electric system is closest in proximity to the location of the
7 solar electricity system; provided that technical requirements
8 set forth in rules of the electric utility relating to
9 interconnection of distributed generating facilities with the
10 electric utility's electric system, as approved by the public
11 utilities commission, are met. Costs incurred by the electric
12 utility to meet technical requirements of interconnection shall
13 be allocated so that those costs that benefit a solar
14 electricity system are borne by the solar electricity producer
15 that uses the solar electricity system to produce solar
16 electricity, in conformity with orders of the public utilities
17 commission relating to distributed generation in the State.
18 Electric system data and data of the solar electricity system
19 shall be disclosed by the electric utility and the supplier when
20 necessary to plan and execute any interconnection in conformity
21 with any technical requirements.



1 (c) Every electric utility shall develop a standard solar
2 electricity purchase agreement and shall make the solar
3 electricity purchase agreement available to a solar electricity
4 producer at the request of the solar electricity producer. Each
5 solar electricity purchase agreement shall have a term of twenty
6 years commencing with the date on which the new solar
7 electricity system is placed in service.

8 (d) The difference between the number of kilowatt-hours of
9 solar electricity supplied by the solar electricity producer to
10 the electric utility and the number of kilowatt-hours of
11 electricity supplied by the electric utility to the solar
12 electricity producer shall be measured, for each monthly billing
13 period during the term of the solar electricity purchase
14 agreement, using "net energy metering", as defined in section
15 269-101, substituting "solar electricity producer" for "eligible
16 customer-generator" in the definition. A solar electricity
17 producer that elects to be paid compensation under a solar
18 electricity purchase agreement shall not be an eligible
19 customer-generator for purposes of part VI of this chapter.

20 (e) At the end of each monthly billing period, if the
21 number of kilowatt-hours of electricity supplied by the electric
22 utility to the solar electricity producer exceeds the number of



1 kilowatt-hours of solar electricity supplied by the solar
2 electricity producer to the electric utility, the solar
3 electricity producer shall owe compensation to the electric
4 utility for the number of kilowatt-hours of electricity supplied
5 by the electric utility in excess of the number of kilowatt-
6 hours of solar electricity supplied to the electric utility.
7 The compensation shall be calculated at the retail rate for the
8 rate class to which the solar electricity producer would be
9 assigned if the solar electricity producer was not a solar
10 electricity producer.

11 (f) At the end of each monthly billing period, if the
12 number of kilowatt-hours of solar electricity supplied by the
13 solar electricity producer to the electric utility exceeds the
14 number of kilowatt-hours of electricity supplied by the electric
15 utility to the solar electricity producer, the electric utility
16 shall pay compensation to the solar electricity producer for the
17 number of kilowatt-hours of solar electricity supplied by the
18 solar electricity producer in excess of the number of kilowatt-
19 hours of electricity supplied to the solar electricity provider.
20 The compensation shall be an amount no less than the number of
21 kilowatt-hours of solar electricity supplied by the electric
22 utility in excess of the number of kilowatt-hours of electricity



1 supplied to the solar electricity producer, multiplied by a rate
2 of compensation that is no less than the greater of:

3 (1) The rate per kilowatt-hour for electricity purchased
4 from the electric utility by the solar electricity
5 producer; or

6 (2) 70.0 cents per kilowatt-hour.

7 (g) A solar electricity producer shall not be subject to
8 any fee, charge, or rate by the electric utility for any
9 unbundled costs associated with providing any standby services,
10 including any unbundled costs associated with providing any
11 backup services, and shall not be subject to any fee, charge, or
12 rate by the electric utility for any capital costs incurred by
13 the electric utility in expectation that usage by the solar
14 electricity producer, or by all the solar electricity producers
15 as a group, of electricity supplied by the electric utility
16 would not decline. Any new or additional demand charge, standby
17 charge, customer charge, minimum monthly charge, interconnection
18 charge, or other charge that would increase a solar electricity
19 provider's costs beyond those of other customers in the rate
20 class to which the solar electricity producer otherwise would be
21 assigned are contrary to the intent of this section and shall
22 not form part of any solar electricity purchase agreement.



1 (h) By December 31 of the second calendar year following
2 the calendar year during which this section takes effect, and by
3 December 31 of every second calendar year thereafter, the energy
4 resources coordinator shall submit, if necessary, a report to
5 the public utilities commission proposing adjustments to the
6 rates of compensation in subsection (f) (2) to reflect
7 technological progress and market developments with respect to
8 the cost of new solar electricity systems.

9 (i) This section shall not apply to a solar electricity
10 system with an installed peak nameplate generating capacity in
11 excess of twenty megawatts.

12 (j) The requirement that an electric utility make
13 available a solar electricity purchase agreement to a solar
14 electricity producer shall not apply to new solar electricity
15 systems that are placed in service after December 31 of the year
16 following the year in which the aggregate peak nameplate
17 generating capacity of solar electricity systems eligible for
18 solar electricity purchase agreements equals five per cent of
19 the electric utility's system peak demand; provided that the
20 public utilities commission may increase, by rule or order, the
21 amount of the aggregate peak nameplate generating capacity above
22 five per cent of the electric utility's system peak demand.



Report Title:

Solar Energy; Electricity; Feed-in Tariff

Description:

Establishes feed-in tariff compensation to solar electricity producers for solar electricity sold to the electric utility.

