HOUSE OF REPRESENTATIVES
TWENTY-FOURTH LEGISLATURE, 2007
STATE OF HAWAII

H.B. NO. 1748

A BILL FOR AN ACT

RELATING TO SOLAR ENERGY.

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

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

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

Over the years, the legislature has worked steadily to encourage the development of solar electricity in Hawaii. Legislative achievements relating to solar electricity include, but are not limited to, a net metering program, utility

interconnection standards, renewable energy technology tax credits, and a statewide renewable energy portfolio standard.

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

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

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

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

"**PART . SOLAR FEED-IN TARIFF**

§269-A Definitions. (a) As used in this part:

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

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

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

"Solar electricity purchase agreement" means a contract or tariff under which the electric utility is obliged to purchase solar electricity produced by a new solar electricity system and made available to the electric utility by the solar electricity producer and to compensate the solar electricity producer for the solar electricity in accordance with the provisions of this section.

"Solar electricity system" means any identifiable facility, equipment, apparatus, or the like that converts solar radiation

energy to electricity, including photovoltaic systems and concentrating solar electric power systems.

§269-B Interconnectivity. (a) At the request of a solar electricity producer that places a new solar electricity system in service, an electric utility shall be obliged to interconnect the solar electricity system to the electric system of the electric utility. The obligation under this section shall apply to the electric utility whose electric system is closest in proximity to the location of the solar electricity system, provided that technical requirements set forth in rules of the electric utility relating to interconnection of distributed generating facilities with the electric utility's electric system, as approved by the public utilities commission, are met.

(b) Costs incurred by the electric utility to meet technical requirements of interconnection shall be allocated so that those costs that benefit a solar electricity system are borne by the solar electricity producer that uses the solar electricity system to produce solar electricity, in conformity with orders of the public utilities commission relating to distributed generation in the State.

(c) Electric system data and data of the solar electricity system shall be disclosed by each of the electric utility and

the solar electricity producer when necessary to plan and execute the interconnection in conformity with such technical requirements.

§269-C Purchase agreements. Every electric utility shall develop a standard solar electricity purchase agreement and shall make the solar electricity purchase agreement available to a solar electricity producer at the request of the solar electricity producer. Each solar electricity purchase agreement shall have a term of twenty years commencing with the date on which the new solar electricity system is placed in service.

§269-D Net energy metering. (a) The difference between the number of kilowatt-hours of solar electricity supplied by the solar electricity producer to the electric utility and the number of kilowatt-hours of electricity supplied by the electric utility to the solar electricity producer shall be measured, for each monthly billing period during the term of the solar electricity purchase agreement, using "net energy metering," as defined in section 269-101, substituting "solar electricity producer" for "eligible customer-generator" in that definition.

(b) A solar electricity producer that elects to be paid compensation under a solar electricity purchase agreement shall

not be an eligible customer-generator for purposes of part VI of this chapter.

(c) At the end of each monthly billing period, if the number of kilowatt-hours of electricity supplied by the electric utility to the solar electricity producer exceeds the number of kilowatt-hours of solar electricity supplied by the solar electricity producer to the electric utility, the solar electricity producer shall owe compensation to the electric utility for the number of kilowatt-hours of electricity supplied by the electric utility in excess of the number of kilowatt-hours of solar electricity supplied to the electric utility. This compensation shall be calculated at the retail rate for the rate class to which the solar electricity producer would be assigned if the solar electricity producer was not a solar electricity producer.

(d) At the end of each monthly billing period, if the number of kilowatt-hours of solar electricity supplied by the solar electricity producer to the electric utility exceeds the number of kilowatt-hours of electricity supplied by the electric utility to the solar electricity producer, the electric utility shall pay compensation to the solar electricity producer for the number of kilowatt-hours of solar electricity supplied by the

solar electricity producer in excess of the number of kilowatt-hours of electricity supplied to the solar electricity producer. This compensation shall be an amount no less than the number of kilowatt-hours of solar electricity supplied by the solar electricity producer in excess of the number of kilowatt-hours of electricity supplied to the solar electricity producer, multiplied by a feed-in tariff rate of compensation that is no less than the greater of:

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

(2) $0.70 cents per kilowatt-hour.

§269-E Charges. (a) A solar electricity producer shall not be subject to any fee, charge, or rate by the electric utility for any unbundled costs associated with providing any standby services, including any unbundled costs associated with providing any backup services.

(b) A solar electricity producer shall not be subject to any fee, charge, or rate by the electric utility for any capital costs incurred by the electric utility in expectation that usage by the solar electricity producer, or by all solar electricity

producers as a group, of electricity supplied by the electric utility would not decline.

(c) Any new or additional demand charge, standby charge, customer charge, minimum monthly charge, interconnection charge, or other charge that would increase a solar electricity producer's costs beyond those of other customers in the rate class to which the solar electricity producer otherwise would be assigned are contrary to the intent of this section and shall not form part of any solar electricity purchase agreement.

§269-F Reporting. No later than December 31 of the second calendar year following the effective date of this section, and no later than December 31 of every second calendar year thereafter, the energy resources coordinator shall submit, if necessary, a report to the legislature proposing adjustments to the rate of compensation in section 269-D(d). This report shall reflect technological progress and market developments, including the market effects of new federal legislation or regulation, with respect to the cost of solar electricity produced by new solar electricity systems.

§269-G Applicability. (a) This section shall not apply to a solar electricity system with an installed peak nameplate

alternating-current operating capacity in excess of twenty megawatts.

(b) The obligation of an electric utility to make available a solar electricity purchase agreement to a solar electricity producer shall not apply with respect to solar electricity produced by a new solar electricity system that is placed in service after December 31 of the year following the year in which the aggregate peak nameplate alternating-current generating capacity of solar electricity systems producing solar electricity for which solar electricity producers have requested solar electricity purchase agreements equals five per cent of the electric utility's system peak demand, provided that the public utilities commission may increase, by rule or order, the aggregate peak nameplate alternating-current generating capacity limit above five per cent of the electric utility's system peak demand.

§269-H Eligibility. A solar electricity producer shall not be eligible for feed-in tariff compensation under this part for any solar electricity produced by a solar electricity system for which an income tax credit was claimed by any taxpayer pursuant to section 235-12.5."

SECTION 3. Section 235-12.5, Hawaii Revised Statutes, is amended to read as follows:

"**§235-12.5 Renewable energy technologies; income tax credit.** (a) When the requirements of subsection (c) are met, each individual or corporate resident taxpayer that files an individual or corporate net income tax return for a taxable year may claim a tax credit under this section against the Hawaii state individual or corporate net income tax. The tax credit may be claimed for every eligible renewable energy technology system that is installed and placed in service by a taxpayer during the taxable year. This credit shall be available for systems installed and placed in service after June 30, 2003. The tax credit may be claimed as follows:

(1) Solar thermal energy systems for:

(A) Single-family residential property: thirty-five per cent of the actual cost or $2,250, whichever is less;

(B) Multi-family residential property: thirty-five per cent of the actual cost or $350 per unit, whichever is less; and

(C) Commercial property: thirty-five per cent of the actual cost or $250,000, whichever is less;

(2) Wind-powered energy systems for:

(A) Single-family residential property: twenty per cent of the actual cost or $1,500, whichever is less;

(B) Multi-family residential property: twenty per cent of the actual cost or $200 per unit, whichever is less; and

(C) Commercial property: twenty per cent of the actual cost or $500,000, whichever is less; and

(3) Photovoltaic energy systems for:

(A) Single-family residential property: thirty-five per cent of the actual cost or $5,000, whichever is less;

(B) Multi-family residential property: thirty-five per cent of the actual cost or $350 per unit, whichever is less; and

(C) Commercial property: thirty-five per cent of the actual cost or $500,000, whichever is less;

provided that multiple owners of a single system shall be entitled to a single tax credit; and provided further that the tax credit shall be apportioned between the owners in proportion to their contribution to the cost of the system.

In the case of a partnership, S corporation, estate, or trust, the tax credit allowable is for every eligible renewable energy technology system that is installed and placed in service by the entity. The cost upon which the tax credit is computed shall be determined at the entity level. Distribution and share of credit shall be determined pursuant to section 235-110.7(a).

(b) For the purposes of this section:

"Actual cost" means costs related to the renewable energy technology systems under subsection (a), including accessories and installation, but not including the cost of consumer incentive premiums unrelated to the operation of the system or offered with the sale of the system and costs for which another credit is claimed under this chapter.

"Renewable energy technology system" means a new system that captures and converts a renewable source of energy, such as wind, heat (solar thermal), or light (photovoltaic) from the sun into:

(1) A usable source of thermal or mechanical energy;

(2) Electricity; or

(3) Fuel.

"Solar or wind energy system" means any identifiable facility, equipment, apparatus, or the like that converts

insolation or wind energy to useful thermal or electrical energy for heating, cooling, or reducing the use of other types of energy that are dependent upon fossil fuel for their generation.

(c) For taxable years beginning after December 31, 2005, the dollar amount of any utility rebate shall be deducted from the cost of the qualifying system and its installation before applying the state tax credit.

(d) The director of taxation shall prepare any forms that may be necessary to claim a tax credit under this section, including forms identifying the technology type of each tax credit claimed under this section, whether for solar thermal, photovoltaic from the sun, or wind. The director may also require the taxpayer to furnish reasonable information to ascertain the validity of the claim for credit made under this section and may adopt rules necessary to effectuate the purposes of this section pursuant to chapter 91.

(e) If the tax credit under this section exceeds the taxpayer's income tax liability, the excess of the credit over liability may be used as a credit against the taxpayer's income tax liability in subsequent years until exhausted. All claims for the tax credit under this section, including amended claims, shall be filed on or before the end of the twelfth month

following the close of the taxable year for which the credit may be claimed. Failure to comply with this subsection shall constitute a waiver of the right to claim the credit.

(f) By or before December 2005, to the extent feasible, using existing resources to assist the energy-efficiency policy review and evaluation, the department shall assist with data collection on the following:

(1) The number of renewable energy technology systems that have qualified for a tax credit during the past year by:

(A) Technology type (solar thermal, photovoltaic from the sun, and wind); and

(B) Taxpayer type (corporate and individual); and

(2) The total cost of the tax credit to the State during the past year by:

(A) Technology type; and

(B) Taxpayer type.

(g) The income tax credit under this section may not be claimed with respect to any solar electricity system to which feed-in tariff compensation is paid pursuant to section 269-D."

SECTION 4. In codifying the new sections added by section 2 of this Act, the revisor of statutes shall substitute

appropriate section numbers for the letters used in designating the new sections in this Act.

SECTION 5. New statutory material is underscored.

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

INTRODUCED BY: _____

JAN 24 2007

Report Title:
Feed-in Tariff; Solar Electricity

Description:
Establishes a feed-in tariff for electricity generated from solar radiation energy by a solar electricity producer.