125th MAINE LEGISLATURE

FIRST REGULAR SESSION-2011

Legislative Document	**No. 1527**
H.P. 1121	House of Representatives, April 28, 2011

An Act To Encourage the Creation of Jobs through Development of Maine's Solar Industry

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Reference to the Committee on Energy, Utilities and Technology suggested and ordered printed.

HEATHER J.R. PRIEST
Clerk

Presented by Representative RUSSELL of Portland.

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 10 MRSA §9722, sub-§6, ¶J, as enacted by PL 2007, c. 699, §6, is amended to read:

J. In the adoption and amendment of the Maine Uniform Building and Energy Code, ensure that nontraditional or experimental construction, including but not limited to straw bale and earth berm construction, is permissible under the code; ~~and~~

Sec. 2. 10 MRSA §9722, sub-§6, ¶K, as enacted by PL 2007, c. 699, §6, is amended to read:

K. In the adoption and amendment of the Maine Uniform Building and Energy Code, ensure that building materials from local sawmills, including but not limited to nongraded lumber, are permissible under the code~~.~~;

Sec. 3. 10 MRSA §9722, sub-§6, ¶L is enacted to read:

L. In the adoption and amendment of the Maine Uniform Building and Energy Code, include standards for installation of solar photovoltaic systems and solar thermal systems in new and existing buildings; and

Sec. 4. 10 MRSA §9722, sub-§6, ¶M is enacted to read:

M. By March 1, 2012, adopt a model ordinance for the permitting of solar photovoltaic and solar thermal systems in existing buildings to promote uniformity in solar permitting among municipalities in the State.

Sec. 5. 35-A MRSA §3210-F is enacted to read:

§3210-F. Improvement of energy efficiency and usage of distributed renewable technology in state-funded construction

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Qualifying" as applied to solar electric generation means solar electric generation that:

(1) Is generated within the State;

(2) Has one megawatt or less capacity; and

(3) Was installed after January 1, 2012.

B. "Solar alternative compliance payment" means a payment of a certain dollar amount per megawatt-hour that a competitive electricity provider may make in lieu of complying with the solar electric generation requirements in subsection 2.

C. "Solar electric generation" means creation of electricity using a system that employs solar radiation to produce energy that powers an electric generator. "Solar electric generation" includes technologies that use the photovoltaic effect.

D. "Solar renewable energy credit" means a type of renewable energy credit issued by the commission that represents the environmental benefits or attributes of one megawatt-hour of solar electric generation.

E. "Total cost of solar incentives" means the sum of the following for a reporting year, except that any particular cost that is within more than one of the categories listed below may not be counted twice:

(1) The total amount of financial assistance for qualifying solar electric generation paid from the charge established under section 10112-A;

(2) The total cost incurred by all competitive electricity providers in the State for solar renewable energy credits used for compliance with the solar set-aside requirements under subsection 2; and

(3) The total revenue from solar alternative compliance payments.

2. Solar set-aside requirements. Portfolio requirements for solar electric generation are governed by this subsection.

A. Beginning January 1, 2015, as a condition of licensing pursuant to section 3203, each competitive electricity provider in this State must demonstrate in a manner satisfactory to the commission that the percentage of its portfolio of supply sources for retail electricity sales in this State accounted for by new cost-effective qualifying solar electric generation pursuant to standards established by the Efficiency Maine Trust Board is as follows:

(1) For the period from January 1, 2015 to December 31, 2015, 0.01%;

(2) For the period from January 1, 2016 to December 31, 2016, 0.017%;

(3) For the period from January 1, 2017 to December 31, 2017, 0.0393%;

(4) For the period from January 1, 2018 to December 31, 2018, 0.0817%;

(5) For the period from January 1, 2019 to December 31, 2019, 0.16%;

(6) For the period from January 1, 2020 to December 31, 2020, 0.221%;

(7) For the period from January 1, 2021 to December 31, 2021, 0.305%;

(8) For the period from January 1, 2022 to December 31, 2022, 0.394%;

(9) For the period from January 1, 2023 to December 31, 2023, 0.497%;

(10) For the period from January 1, 2024 to December 31, 2024, 0.621%;

(11) For the period from January 1, 2025 to December 31, 2025, 0.765%;

(12) For the period from January 1, 2026 to December 31, 2026, 0.928%;

(13) For the period from January 1, 2027 to December 31, 2027, 1.118%;

(14) For the period from January 1, 2028 to December 31, 2028, 1.333%;

(15) For the period from January 1, 2029 to December 31, 2029, 1.572%;

(16) For the period from January 1, 2030 to December 31, 2030, 1.836%; and

(17) For the period from January 1, 2031 to December 31, 2031, 2%.

B. Qualifying solar electric generation resources used to satisfy the requirements of paragraph A may also be used to satisfy the requirements of section 3210, subsection 3-A.

C. The commission shall adopt rules setting the minimum percentages of qualifying solar electric generation required beginning January 1, 2032 and for each subsequent year with rules going into effect no less than 2 years after adoption. These minimum percentages must be no lower than those required during 2031 pursuant to paragraph A, as adjusted pursuant to subsection 5.

3. Compliance. A competitive electricity provider may demonstrate compliance with the solar set-aside under subsection 2 using solar renewable energy credits or direct supply of qualifying solar electric generation or through a solar alternative compliance payment.

4. Solar renewable energy credits. In carrying out this section, the commission shall take account of solar electric generation investors' need for a predictable market by:

A. Awarding long-term solar renewable energy credit contracts for qualifying solar electric resources;

B. Allowing fractional solar renewable energy credits to carry over to the next calendar year;

C. Promoting aggregation of fractional solar renewable energy credits; and

D. Adopting rules clarifying solar renewable energy credit ownership.

5. Cap on solar incentives; suspension of requirements. Caps on the total cost of solar incentives, resulting in the suspension of scheduled increases in solar set-aside requirements under subsection 2, are governed by this subsection.

A. If the commission determines that the total cost of solar incentives for a calendar year exceeds 1% of the total retail cost of electricity for that year, then the percentage of solar electric generation required under subsection 2, paragraph A for the calendar year in which the commission makes its determination continues to be the percentage required in each subsequent year until the limitation ends pursuant to paragraph B.

B. If the limitation in paragraph A is triggered, the limitation ends after the commission determines that the total cost of solar incentives for a calendar year did not exceed 1% of the total retail cost of electricity for that year.

C. For the next calendar year after the limitation ends under paragraph B, the percentage of qualifying solar electric generation required is the percentage in subsection 2, paragraph A for the calendar year immediately following the reporting year in which the limitation was triggered. Thereafter, the percentage of solar electric generation increases each reporting year as set out in subsection 2, paragraph A until it reaches 2% or the greatest percentage adopted under subsection 2, paragraph C.

6. Solar alternative compliance payment. The commission shall allow a competitive electricity provider to satisfy the solar set-aside requirements under

subsection 2 through a solar alternative compliance payment mechanism pursuant to this subsection.

A. To comply with this subsection, a competitive electricity provider shall submit to the commission one solar alternative compliance payment for each megawatt-hour of qualifying solar electric generation required.

B. The commission shall collect solar alternative compliance payments and shall deposit all funds collected under this subsection in the solar and wind energy rebate program fund established pursuant to section 10112-A.

C. For 2015, the solar alternative compliance payment is 200% of the average market value of solar renewable energy credits sold during that year. The ratio of the solar alternative compliance payment to the average market value of solar renewable energy credits sold during a calendar year must decrease 8 percentage points each subsequent year, until 2025, when the solar alternative compliance payment is 120% of the average market value of solar renewable energy credits sold in that calendar year.

D. The commission shall adopt rules setting the solar alternative compliance payment beginning January 1, 2026 and for each subsequent year, but in no event may the solar alternative compliance payment be higher than 120% of the average market value of solar renewable energy credits sold during the previous calendar year.

E. By February 1st of each year, the commission shall release an updated study of the State's solar energy market and shall identify any needed changes to the cost associated with the solar alternative compliance payment.

7. Rules. Rules adopted to implement this section are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

Sec. 6. 35-A MRSA §10112-A is enacted to read:

§10112-A. Solar and wind energy rebate program

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Qualified solar energy system" means a solar photovoltaic system or a solar thermal system.

B. "Qualified solar thermal water system installer" means a person who has been certified by the trust to install solar thermal systems designed to heat water and who holds a current license from the State as a master plumber, as a master oil burner technician or as a propane and natural gas technician or has been certified as a type II, type III or universal heating, ventilation and air conditioning refrigeration technician through a certification program approved by the United States Environmental Protection Agency.

C. "Qualified wind energy system" means any device, such as a wind charger, windmill or wind turbine and associated facilities, with a peak generating capacity of

100 kilowatts or less that converts wind energy to electrical energy for use primarily in a residence, public facility or place of business that is located in an area with demonstrated wind power potential.

D. "Solar photovoltaic system" means a solar energy device with a peak generating capacity of 100 kilowatts or less used for generating electricity for use in a residence or place of business.

E. "Solar thermal system" means a configuration of solar collectors and a pump, heat exchanger and storage tank or fans designed to heat water or air for the purpose of space heating, domestic water heating or both space and domestic water heating. Solar thermal system types include, but are not limited to, forced circulation, integral collector storage, thermosyphon and self-pumping systems.

The trust may by rule expand the definitions in paragraphs A, C, D and E to accommodate changes in technology and if statutory changes are needed shall notify the joint standing committee of the Legislature having jurisdiction over energy, utilities and technology matters.

2. Solar and wind energy rebate program. To the extent that funds are available in the fund established in subsection 6 and the requirements of subsection 4 are satisfied, an owner or tenant of residential or commercial property located in the State is entitled to a rebate for a qualified solar energy system or qualified wind energy system that is installed in accordance with this subsection after January 1, 2012 and that will be connected to the electrical grid. The trust shall set rebate levels for qualified solar energy systems and qualified wind energy systems. In setting rebate levels, the trust may consider market demand for qualified solar energy systems and qualified wind energy systems, program implementation experience and other factors relevant to the solar and wind energy rebate program.

A. To qualify for a rebate, a solar photovoltaic system must be installed by a master electrician who has been certified by a North American board of certified energy practitioners or by a master electrician working in conjunction with a person who has been certified by a North American board of certified energy practitioners.

B. To qualify for a rebate, a solar thermal system designed to heat water must be installed by a qualified solar thermal water system installer and, if the solar thermal system is designed to heat potable water, it must be installed by a qualified solar thermal water system installer who holds a current license as a master plumber or by a qualified solar thermal water system installer working in conjunction with a master plumber.

C. To qualify for a rebate, the electrical components of a qualified wind energy system must be installed by a master electrician or by a factory-trained and approved dealer for the qualified wind energy system working under the supervision of a master electrician.

In the case of a newly constructed residence, the rebate must be available to the original owner or occupant.

3. Solar rebate amounts. The rebate for a qualified solar energy system under this section may be no less than 50% of the installed cost of qualified solar energy systems

with 15 kilowatts or less of installed capacity. The rebate may be no less than 25% of the installed cost of qualified solar energy systems with greater than 15 kilowatts of installed capacity. The trust may amend the solar rebate amounts by rule. In amending rebate amounts, the trust shall consider market demand for qualified solar energy systems, program implementation experience and other factors relevant to the solar energy rebate program.

4. Energy audit requirement; solar photovoltaic system. To qualify for a rebate for a solar photovoltaic system under this section, an owner or tenant of residential or commercial property located in the State must demonstrate to the satisfaction of the trust that an energy audit has been completed.

5. Limitation to residents of State. Participation in the solar and wind energy rebate program established in this section is limited to residents of the State.

6. Funding. The commission shall assess transmission and distribution utilities to collect funds for the solar and wind energy rebate program established in this section. The amount of all assessments by the commission under this subsection must result in total program expenditures by each transmission and distribution utility that do not exceed .02 cent per kilowatt-hour. To the extent practicable, the commission shall establish and collect the assessment in a manner that is consistent with the assessment made under section 10110.

7. Fund established. There is established a solar and wind energy rebate program fund to be used by the trust solely for the purposes of this section. All assessments made under this section must be transferred to the solar and wind energy rebate program fund. Any interest on funds in the fund must be credited to the fund. Funds not spent in any fiscal year remain in the fund to be used for the purposes of this section. The trust shall determine the allotment of the fund in each fiscal year between solar photovoltaic system rebates, solar thermal system rebates and qualified wind energy system rebates. A maximum of 5% of the fund may be allotted to wind energy system rebates, and a minimum of 50% of the fund must be provided to solar photovoltaic system rebates.

SUMMARY

This bill promotes development of Maine's solar industry. It requires the Maine Uniform Building and Energy Code to include standards for solar installations in new and existing buildings, and requires the Technical Building Codes and Standards Board to adopt a model municipal ordinance for solar permitting. The bill also creates a solar set-aside within Maine's existing renewable portfolio standard. The bill also revives the solar and wind energy rebate program.