

**No. 170. An act relating to the Vermont energy act of 2012.**

(S.214)

It is hereby enacted by the General Assembly of the State of Vermont:

\* \* \* Renewable Energy Goals, Definitions \* \* \*

Sec. 1. 30 V.S.A. § 8001 is amended to read:

§ 8001. RENEWABLE ENERGY GOALS

(a) The general assembly finds it in the interest of the people of the state to promote the state energy policy established in section 202a of this title by:

(1) Balancing the benefits, lifetime costs, and rates of the state's overall energy portfolio to ensure that to the greatest extent possible the economic benefits of renewable energy in the state flow to the Vermont economy in general, and to the rate paying citizens of the state in particular.

(2) Supporting development of renewable energy that uses natural resources efficiently and related planned energy industries in Vermont, and the jobs and economic benefits associated with such development, while retaining and supporting existing renewable energy infrastructure.

\* \* \*

(5) Protecting and promoting air and water quality ~~by means of renewable energy programs~~ in the state and region through the displacement of those fuels, including fossil fuels, which are known to emit or discharge pollutants.

(6) Contributing to reductions in global climate change and anticipating the impacts on the state's economy that might be caused by federal regulation designed to attain those reductions.

(7) ~~Supporting and providing incentives for small, distributed renewable energy generation, including~~ Providing support and incentives that support locating such generation to locate renewable energy plants of small and moderate size in a manner that is distributed across the state's electric grid, including locating such plants in areas that will provide benefit to the operation and management of the state's electric that grid through such means as reducing line losses and addressing transmission and distribution constraints.

(8) Promoting the inclusion, in Vermont's electric supply portfolio, of renewable energy plants that are diverse in plant capacity and type of renewable energy technology.

(b) The board shall provide, by order or rule, the regulations and procedures that are necessary to allow the board and the department to implement and supervise programs pursuant to this chapter.

Sec. 2. 30 V.S.A. § 8002 is amended to read:

§ 8002. DEFINITIONS

For purposes of this chapter:

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(2) “Renewable energy” means energy produced using a technology that relies on a resource that is being consumed at a harvest rate at or below its natural regeneration rate.

(A) For purposes of this subdivision (2), methane gas and other flammable gases produced by the decay of sewage treatment plant wastes or landfill wastes and anaerobic digestion of agricultural products, byproducts, or wastes shall be considered renewable energy resources, but no form of solid waste, other than agricultural or silvicultural waste, shall be considered renewable.

(B) For purposes of this subdivision (2), no form of nuclear fuel shall be considered renewable.

(C) The only portion of electricity produced by a system of generating resources that shall be considered renewable is that portion generated by a technology that qualifies as renewable under this subdivision (2).

(D) After conducting administrative proceedings, the board may add technologies or technology categories to the definition of “renewable energy,” provided that technologies using the following fuels shall not be considered renewable energy supplies: coal, oil, propane, and natural gas.

(E) For the purposes of this chapter, renewable energy refers to either “existing renewable energy” or “new renewable energy.”

(3) “Existing renewable energy” means ~~all types of~~ renewable energy ~~sold from the supply portfolio of a Vermont retail electricity provider that is not considered to be from a new renewable energy source~~ produced by a plant that came into service prior to or on December 31, 2004.

(4) “New renewable energy” means renewable energy produced by a ~~generating resource~~ specific and identifiable plant coming into service after December 31, 2004.

(A) ~~With respect to~~ Energy from within a system of generating ~~resources~~ plants that includes renewable energy, ~~the percentage of the system that constitutes~~ shall not constitute new renewable energy ~~shall be determined through dividing the plant capacity of the system’s generating resources coming into service after December 31, 2004 that produce renewable energy by the total plant capacity of the system, regardless of whether the system includes specific plants that came or come into service after December 31, 2004.~~

(B) “New renewable energy” also may include the additional energy from an existing renewable ~~facility~~ energy plant retrofitted with advanced technologies or otherwise operated, modified, or expanded to increase the kWh output of the ~~facility~~ plant in excess of an historical baseline established by calculating the average output of that ~~facility~~ plant for the 10-year period that ended December 31, 2004. If the production of new renewable energy through

changes in operations, modification, or expansion involves combustion of the resource, the system also must result in an incrementally higher level of energy conversion efficiency or significantly reduced emissions. ~~For the purposes of this chapter, renewable energy refers to either “existing renewable energy” or “new renewable energy.”~~

(5) ~~“Qualifying SPEED resources” means contracts for in-state resources in the SPEED program established under section 8005 of this title that meet the definition of new renewable energy under this section, whether or not renewable energy credits environmental attributes are attached.~~

(6) ~~“Nonqualifying SPEED resources” means contracts for in-state resources in the SPEED program established under section 8005 of this title that are fossil fuel based, combined heat and power (CHP) facilities that sequentially produce both electric power and thermal energy from a single source or fuel. In addition, at least 20 percent of a facility’s fuel’s total recovered energy must be thermal and at least 13 percent must be electric, the design system efficiency (the sum of full load design thermal output and electric output divided by the heat input) must be at least 65 percent, and the facility must meet air quality standards established by the agency of natural resources.~~

(7) “Energy conversion efficiency” means the effective use of energy and heat from a combustion process.

(7) “Environmental attributes” means the characteristics of a plant that enable the energy it produces to qualify as renewable energy and include any and all benefits of the plant to the environment such as avoided emissions or other impacts to air, water, or soil that may occur through the plant’s displacement of a nonrenewable energy source.

(8) “Tradeable renewable energy credits” means all of the environmental attributes associated with a single unit of energy generated by a renewable energy source where:

(A) those attributes are transferred or recorded separately from that unit of energy;

(B) the party claiming ownership of the tradeable renewable energy credits has acquired the exclusive legal ownership of all, and not less than all, the environmental attributes associated with that unit of energy; and

(C) exclusive legal ownership can be verified through an auditable contract path or pursuant to the system established or authorized by the board or any program for tracking and verification of the ownership of environmental attributes of energy legally recognized in any state and approved by the board.

(9) “Retail electricity provider” or “provider” means a company engaged in the distribution or sale of electricity directly to the public.

(10) “Board” means the public service board under section 3 of this title, except when used to refer to the clean energy development board.

(11) “Commissioned” or “commissioning” means the first time a plant is put into operation following initial construction or modernization if the costs of modernization are at least 50 percent of the costs that would be required to build a new plant including all buildings and structures technically required for the new plant’s operation. However, these terms shall not include activities necessary to establish operational readiness of a plant.

(12) “Plant” means ~~any~~ an independent technical facility that generates electricity from renewable energy. A group of newly constructed facilities, such as wind turbines, shall be considered one plant if the group is part of the same project and uses common equipment and infrastructure such as roads, control facilities, and connections to the electric grid.

\* \* \*

(21) “Vermont composite electric utility system” means the combined generation, transmission, and distribution resources along with the combined retail load requirements of the Vermont retail electricity providers.

(22) “CPI” means the Consumer Price Index for all urban consumers, designated as “CPI-U,” in the northeast region, as published by the U.S. Department of Labor, Bureau of Labor Statistics.

(23) “Greenhouse gas reduction credits” shall be as defined in section 8006a of this title.

\* \* \* SPEED Program; General \* \* \*

Sec. 3. 30 V.S.A. § 8005 is amended to read:

§ 8005. SUSTAINABLY PRICED ENERGY ENTERPRISE

DEVELOPMENT (SPEED) PROGRAM; TOTAL RENEWABLES

TARGETS

(a) ~~In order to~~ Creation. To achieve the goals of section 8001 of this title, there is created the Sustainably Priced Energy Enterprise Development (SPEED) program. ~~The SPEED program shall have two categories of projects: qualifying SPEED resources and nonqualifying SPEED resources.~~

(b) Board; powers and duties. The SPEED program shall be established, by rule, order, or contract, by the board. As part of the SPEED program, the board may, and in the case of subdivisions (1), (2), and (5) of this subsection, shall:

(1) Name one or more entities to become engaged in the purchase and resale of electricity generated within the state by means of ~~qualifying SPEED resources or nonqualifying SPEED resources,~~ and shall implement the standard offer required by subdivision (2) of this subsection through this entity or entities. An entity appointed under this subdivision shall be known as a SPEED facilitator.

(2) Issue standard offers for ~~qualifying SPEED resources with a plant capacity of 2.2 MW or less~~ in accordance with section 8005a of this title.



~~These standard offers shall be available until the cumulative plant capacity of all such resources commissioned in the state that have accepted a standard offer under this subdivision (2) equals or exceeds 50 MW; provided, however, that a plant owned and operated by a Vermont retail electricity provider shall count toward this 50 MW ceiling if the plant has a plant capacity of 2.2 MW or less and is commissioned on or after September 30, 2009. The term of a standard offer required by this subdivision (2) shall be 10 to 20 years, except that the term of a standard offer for a plant using solar power shall be 10 to 25 years. The price paid to a plant owner under a standard offer required by this subdivision shall include an amount for each kWh generated that shall be set as follows:~~

~~(A) Until the board determines the price to be paid to a plant owner in accordance with subdivision (2)(B) of this subsection, the price shall be:~~

~~(i) For a plant using methane derived from a landfill or an agricultural operation, \$0.12 per kWh.~~

~~(ii) For a plant using wind power that has a plant capacity of 15 kW or less, \$0.20 per kWh.~~

~~(iii) For a plant using solar power, \$0.30 per kWh.~~

~~(iv) For a plant using hydropower, wind power with a plant capacity greater than 15 kW, or biomass power that is not subject to subdivision (2)(A)(i) of this subsection, a price equal, at the time of the plant's~~

~~commissioning, to the average residential rate per kWh charged by all of the state's retail electricity providers weighted in accordance with each such provider's share of the state's electric load.~~

~~(B) In accordance with the provisions of this subdivision, the board by order shall set the price to be paid to a plant owner under a standard offer, including the owner of a plant described in subdivisions (2)(A)(i)-(iv) of this subsection.~~

~~(i) The board shall use the following criteria in setting a price under this subdivision:~~

~~(I) The board shall determine a generic cost, based on an economic analysis, for each category of generation technology that constitutes renewable energy. In conducting such an economic analysis the board shall:~~

~~(aa) Include a generic assumption that reflects reasonably available tax credits and other incentives provided by federal and state governments and other sources applicable to the category of generation technology. For the purpose of this subdivision (2)(B), the term "tax credits and other incentives" excludes tradeable renewable energy credits.~~

~~(bb) Consider different generic costs for subcategories of different plant capacities within each category of generation technology.~~

~~(II) The board shall include a rate of return on equity not less than the highest rate of return on equity received by a Vermont investor-owned~~

~~retail electric service provider under its board approved rates as of the date a standard offer goes into effect.~~

~~(III) The board shall include such adjustment to the generic costs and rate of return on equity determined under subdivisions (2)(B)(i)(I) of this subsection as the board determines to be necessary to ensure that the price provides sufficient incentive for the rapid development and commissioning of plants and does not exceed the amount needed to provide such an incentive.~~

~~(ii) No later than September 15, 2009, the board shall open and complete a noncontested case docket to accomplish each of the following tasks:~~

~~(I) Determine whether there is a substantial likelihood that one or more of the prices stated in subdivision (2)(A) of this subsection do not constitute a reasonable approximation of the price that would be paid applying the criteria of subdivision (2)(B)(i).~~

~~(II) If the board determines that one or more of the prices stated in subdivision (2)(A) of this subsection do not constitute such an approximation, set interim prices that constitute a reasonable approximation of the price that would be paid applying the criteria of subdivision (2)(B)(i). Once the board sets such an interim price, that interim price shall be used in subsequent standard offers until the board sets prices under subdivision (2)(B)(iii) of this subsection.~~

~~(iii) Regardless of its determination under subdivision (2)(B)(ii) of this subsection, the board shall proceed to set, no later than January 15, 2010, the price to be paid to a plant owner under a standard offer applying the criteria of subdivision (2)(B)(i) of this subsection.~~

~~(C) On or before January 15, 2012 and on or before every second January 15 after that date, the board shall review the prices set under subdivision (2)(B) of this subsection and determine whether such prices are providing sufficient incentive for the rapid development and commissioning of plants. In the event the board determines that such a price is inadequate or excessive, the board shall reestablish the price, in accordance with the requirements of subdivision (2)(B)(i) of this subsection, for effect on a prospective basis commencing two months after the price has been reestablished.~~

~~(D) Once the board determines, under subdivision (2)(B) or (C) of this subsection, the generic cost and rate of return elements for a category of renewable energy, the price paid to a plant owner under a subsequently executed standard offer contract shall comply with that determination.~~

~~(E) A plant owner who has executed a contract for a standard offer under this section prior to a determination by the board under subdivision (2)(B) or (C) of this subsection shall continue to receive the price agreed on in that contract.~~

~~(F) Notwithstanding any other provision of this section, on and after June 8, 2010, a standard offer shall be available for a qualifying existing plant.~~

~~(i) For the purpose of this subdivision, “qualifying existing plant” means a plant that meets all of the following:~~

~~(I) The plant was commissioned on or before September 30, 2009.~~

~~(II) The plant generates electricity using methane derived from an agricultural operation and has a plant capacity of 2.2 MW or less.~~

~~(III) On or before September 30, 2009, the plant owner had a contract with a Vermont retail electricity provider to supply energy or attributes, including tradeable renewable energy credits from the plant, in connection with a renewable energy pricing program approved under section 8003 of this title.~~

~~(ii) Plant capacity of a plant accepting a standard offer pursuant to this subdivision (2)(F) shall not be counted toward the 50 MW amount under this subsection (b).~~

~~(iii) Award of a standard offer under this subdivision (2)(F) shall be on condition that the plant owner and the retail electricity provider agree to modify any existing contract between them described under subdivision (i)(III) of this subdivision (2)(F) so that the contract no longer requires energy from the plant to be provided to the retail electricity provider. Those provisions of~~

~~such a contract that concern tradeable renewable energy credits associated with the plant may remain in force.~~

~~(iv) The price and term of a standard offer contract under this subdivision (2)(F) shall be the same, as of the date such a contract is executed, as the price and term otherwise in effect under this subsection (b) for a plant that uses methane derived from an agricultural operation.~~

~~(G) Notwithstanding the requirement of this subsection (b) that a standard offer be available for qualifying SPEED resources, the board shall make a standard offer available under this subdivision (2) to an existing hydroelectric plant that does not exceed the 2.2 MW plant capacity limit of this subsection. To such plants, the board shall not allocate more of the cumulative 50 MW plant capacity under this subdivision (2) than exceeds the amount of such capacity that is unsubscribed as of January 1, 2012. Before making this standard offer available, the board shall notify potentially eligible plants known to it and shall publish broad public notice of the future availability of the standard offer. The notice shall direct that all potentially eligible plants shall file with the board a statement of interest in the standard offer by a date to be no less than 30 days from the date of the notice. No plant may participate in this standard offer unless it timely files such a statement. The filing of such a statement shall constitute the consent of the plant owner to produce such information as the board may reasonably require to carry out this subdivision~~

~~(2)(G), including information the board deems necessary to determine a generic cost in setting the price. The board shall have authority to require the production of such information from a plant that files a statement of interest.~~

~~For the purpose of this subdivision (2)(G):~~

~~(i) “Existing hydroelectric plant” means a hydroelectric plant located in the state that was in service as of January 1, 2009 and does not, as of the effective date of this subdivision (2)(G), have an agreement with the board’s purchasing agent for the purchase of its power pursuant to subdivision 209(a)(8) of this title and board rules adopted under that subdivision. The term includes hydroelectric plants that have never had such an agreement and hydroelectric plants for which such an agreement expired prior to May 25, 2011.~~

~~(ii) The provisions of subdivisions (2)(B)(i)(I)-(III) of this subsection (standard offer pricing criteria) shall apply, except that:~~

~~(I) The term “generic cost,” when applied by the board to determine the price of a standard offer for an existing hydroelectric plant, shall mean the cost to own, reliably operate, and maintain such a plant for the duration of the standard offer contract. In determining this cost, the board shall consider including a generic assumption with respect to rehabilitation costs based on relevant factors such as the age of the potentially eligible plants; recently constructed or currently proposed rehabilitations to such plants; the~~

~~investment that a reasonably prudent person would have made in such a plant to date under the circumstances of the plant, including the price received for power; and the availability for such a plant of improved technology.~~

~~(H) The incentive described under subdivision (2)(B)(i)(III) of this subsection shall be an incentive for continued safe, efficient, and reliable operation of existing hydroelectric plants.~~

\* \* \*

(5) ~~Require~~ In accordance with section 8005a of this section, require all Vermont retail electricity providers to purchase from the SPEED facilitator, ~~in accordance with subdivision (g)(2) of this section,~~ the power generated by the plants that accept the standard offer required to be issued under ~~subdivision (2) of this subsection~~ section 8005a. For the purpose of this subdivision (5), the board and the SPEED facilitator constitute instrumentalities of the state.

\* \* \*

(7) ~~Create a mechanism by which a retail electricity provider may establish that it has a sufficient amount of renewable energy, or resources that would otherwise qualify under the provisions of subsection (d) of this section, in its portfolio so that equity requires that the retail electricity provider be relieved, in whole or in part, from requirements established under this subsection that would require a retail electricity provider to purchase SPEED power, provided that this mechanism shall not apply to the requirement to~~



~~purchase power under subdivision (5) of this subsection. However, a retail electricity provider that establishes that it receives at least 25 percent of its energy from qualifying SPEED resources that were in operation on or before September 30, 2009, shall be exempt and wholly relieved from the requirements of subdivisions (b)(5) (requirement to purchase standard offer power) and (g)(2) (allocation of standard offer electricity and costs) of this section. [Repealed.]~~

(8) Provide that in any proceeding under subdivision 248(a)(2)(A) of this title for the construction of a renewable energy plant, a demonstration of compliance with subdivision 248(b)(2) of this title, relating to establishing need for the facility plant, shall not be required if the facility plant is a SPEED resource and if no part of the facility plant is financed directly or indirectly through investments, other than power contracts, backed by Vermont electricity ratepayers.

(9) Take such other measures as the board finds necessary or appropriate to implement SPEED.

(c) VEDA; eligible facilities. Developers of ~~qualifying and nonqualifying~~ in-state SPEED resources shall be entitled to classification as an eligible facility under ~~chapter 12 of Title 10 V.S.A. chapter 12~~, relating to the Vermont Economic Development Authority.

(d) Goals and targets. To advance the goals stated in section 8001 of this title, the following goals and targets are established.

(1) 2012 SPEED goal. The board shall meet on or before January 1, 2012 and open a proceeding to determine the total amount of ~~qualifying~~ SPEED resources that have been supplied to Vermont retail electricity providers or have been issued a certificate of public good. If the board finds that the amount of ~~qualifying~~ SPEED resources coming into service or having been issued a certificate of public good after January 1, 2005 and before July 1, 2012 equals or exceeds total statewide growth in electric retail sales during that time, and in addition, at least five percent of the 2005 total statewide electric retail sales is provided by ~~qualified~~ SPEED resources or would be provided by ~~qualified~~ SPEED resources that have been issued a certificate of public good, or if it finds that the amount of ~~qualifying~~ SPEED resources equals or exceeds 10 percent of total statewide electric retail sales for calendar year 2005, the portfolio standards established under this chapter shall not be in force. The board shall make its determination by January 1, 2013. If the board finds that the goal established has not been met, one year after the board's determination the portfolio standards established under subsection 8004(b) of this title shall take effect.

(2) 2017 SPEED goal. A state goal is to assure that 20 percent of total statewide electric retail sales ~~before July 1, 2017~~ during the year commencing

January 1, 2017 shall be generated by SPEED resources that constitute new renewable energy. ~~The board shall report to the house and senate committees on natural resources and energy and to the joint energy committee by December 31, 2011 with regard to the state's progress in meeting this goal. In addition, the board shall report to the house and senate committees on natural resources and energy and to the joint energy committee by December 31, 2013 with regard to the state's progress in meeting this goal and, if necessary, shall include any appropriate recommendations for measures that will make attaining the goal more likely.~~ On or before January 31, 2018, the board shall meet and open a proceeding to determine, for the calendar year 2017, the total amount of SPEED resources that were supplied to Vermont retail electricity providers and the total amount of statewide retail electric sales.

(3) Determinations. For the purposes of the ~~determination~~ determinations to be made under ~~this subsection, subdivisions (1) and (2) of this subsection (d), the total amount of SPEED resources shall be the amount of electricity produced at all facilities SPEED resources owned by or under long-term contract to Vermont retail electricity providers, whether it is generated inside or outside Vermont, that is new renewable energy shall be counted in the calculations under subdivisions (1) and (2) of this subsection.~~

(4) Total renewables targets. This subdivision establishes, as percentages of annual electric sales, target amounts of total renewable energy within the supply portfolio of each renewable electricity provider.

(A) The target amounts of total renewable energy established by this subsection shall be 55 percent of each retail electricity provider's annual electric sales during the year beginning January 1, 2017, increasing by an additional four percent each third January 1 thereafter, until reaching 75 percent on and after January 1, 2032.

(B) Each retail electricity provider shall manage its supply portfolio to be reasonably consistent with the target amounts established by this subdivision (4). The board shall consider such consistency during the course of reviewing a retail electricity provider's charges and rates under this title, integrated resource plans under section 218c of this title, and petitions under section 248 (new gas and electric purchases, investments, and facilities) of this title. However, nothing in this subdivision (4) shall relieve a retail electricity provider from the obligations of section 8004 (renewable portfolio standards) of this title.

(e) Regulations and procedures. The board shall provide, by order or rule, the regulations and procedures that are necessary to allow the board and the department to implement, and to supervise further the implementation and maintenance of the SPEED program. These rules shall assure that decisions

with respect to certificate of public good applications for construction of SPEED resources shall be made in a timely manner.

(f) Preapproval. In order to encourage joint efforts on the part of regulated companies to purchase power that meets or exceeds the SPEED standards and to secure stable, long-term contracts beneficial to Vermonters, the board may establish standards for pre-approving the recovery of costs incurred on a SPEED project that is the subject of that joint effort.

(g) ~~With respect to executed contracts for standard offers under this section:~~

~~(1) Such a contract shall be transferable. The contract transferee shall notify the SPEED facilitator of the contract transfer within 30 days of transfer.~~

~~(2) The SPEED facilitator shall distribute the electricity purchased to the Vermont retail electricity providers at the price paid to the plant owners, allocated to the providers based on their pro rata share of total Vermont retail kWh sales for the previous calendar year, and the Vermont retail electricity providers shall accept and pay the SPEED facilitator for the electricity.~~

~~(3) The SPEED facilitator shall transfer any tradeable renewable energy credits attributable to electricity purchased under standard offer contracts to the Vermont retail electricity providers in accordance with their pro rata share of the costs for such electricity as determined under subdivision (2) of this subsection, except that in the case of a plant using methane from agricultural~~

~~operations, the plant owner shall retain such credits to be sold separately at the owner's discretion.~~

~~(4) The SPEED facilitator shall transfer all capacity rights attributable to the plant capacity associated with the electricity purchased under standard offer contracts to the Vermont retail electricity providers in accordance with their pro rata share of the costs for such electricity as determined under subdivision (2) of this subsection.~~

~~(5) All reasonable costs of a Vermont retail electricity provider incurred under this subsection shall be included in the provider's revenue requirement for purposes of ratemaking under sections 218, 218d, 225, and 227 of this title. In including such costs, the board shall appropriately account for any credits received under subdivisions (2) and (3) of this subsection. Costs included in a retail electricity provider's revenue requirement under this subdivision shall be allocated to the provider's ratepayers as directed by the board.~~

~~(h) With respect to standard offers under this section, the board shall by rule or order:~~

~~(1) Determine a SPEED facilitator's reasonable expenses arising from its role and the allocation of such expenses among plant owners and Vermont retail electricity providers.~~

~~(2) Determine the manner and timing of payments by a SPEED facilitator to plant owners for energy purchased under an executed contract for a standard offer.~~

~~(3) Determine the manner and timing of payments to the SPEED facilitator by the Vermont retail electricity providers for energy distributed to them under executed contracts for standard offers.~~

~~(4) Establish reporting requirements of a SPEED facilitator, a plant owner, and a Vermont retail electricity provider.~~

~~(i) With respect to standard offers under this section, the board shall determine whether its existing rules sufficiently address metering and the allocation of metering costs, and make such rule revisions as needed to implement the standard offer requirements of this section.~~

~~(j) Wood biomass resources that would otherwise constitute qualifying SPEED resources may receive a standard offer under subdivision (b)(2) of this section only if they have a design system efficiency (the sum of full load design thermal output and electric output divided by the heat input) of at least 50 percent.~~

~~(k) A Vermont retail electricity provider shall not be eligible for a standard offer contract under subdivision (b)(2) of this section. However, under subdivision (g)(1) of this section, a plant owner may transfer to such a provider all rights associated with a standard offer contract that has been offered to the~~

~~plant without affecting the plant's status under the standard offer program. In the case of such a transfer of rights, the plant shall not be considered a utility-owned and operated plant under subdivisions (b)(2) and (g)(2) of this section.~~

~~(l) The existence of a standard offer under subdivision (b)(2) of this section shall not preclude a voluntary contract between a plant owner and a Vermont retail electricity provider on terms that may be different from those under the standard offer. A plant owner who declines a voluntary contract may still accept a standard offer under this section.~~

~~(m) State; nonliability. The state and its instrumentalities shall not be liable to a plant owner or retail electricity provider with respect to any matter related to SPEED, including costs associated with a standard offer contract under this section or section 8005a of this title or any damages arising from breach of such a contract, the flow of power between a plant and the electric grid, or the interconnection of a plant to that grid.~~

~~(n) On or before January 15, 2011 and every second January 15 afterward, the board shall report to the house and senate committees on natural resources and energy concerning the status of the standard offer program under this section. In its report, the board at a minimum shall:~~

~~(1) Assess the progress made toward attaining the cumulative statewide capacity ceiling stated in subdivision (b)(2) of this section.~~



~~(2) If that cumulative statewide capacity ceiling has not been met, identify the barriers to attaining that ceiling and detail the board's recommendations for overcoming such barriers.~~

~~(3) If that cumulative statewide capacity has been met or is likely to be met within a year of the date of the board's report, recommend whether the standard offer program under this section should continue and, if so, whether there should be any modifications to the program.~~

\* \* \* SPEED Program; Standard Offer \* \* \*

Sec. 4. 30 V.S.A. § 8005a is added to read:

§ 8005a. SPEED; STANDARD OFFER PROGRAM

(a) Establishment. A standard offer program is established within the SPEED program. To achieve the goals of section 8001 of this title, the board shall issue standard offers for renewable energy plants that meet the eligibility requirements of this section. The board shall implement these standard offers through the SPEED facilitator.

(b) Eligibility. To be eligible for a standard offer under this section, a plant must constitute a qualifying small power production facility under 16 U.S.C. § 796(17)(C) and 18 C.F.R. part 292, must not be a net metering system under section 219a of this title, and must be a new standard offer plant. For the purpose of this section, "new standard offer plant" means a renewable energy

plant that is located in Vermont, that has a plant capacity of 2.2 MW or less, and that is commissioned on or after September 30, 2009.

(c) Cumulative capacity. In accordance with this subsection, the board shall issue standard offers to new standard offer plants until a cumulative plant capacity amount of 127.5 MW is reached.

(1) Pace. Annually commencing April 1, 2013, the board shall increase the cumulative plant capacity of the standard offer program (the annual increase) until the 127.5-MW cumulative plant capacity of this subsection is reached.

(A) Annual amounts. The amount of the annual increase shall be five MW for the three years commencing April 1, 2013, 7.5 MW for the three years commencing April 1, 2016, and 10 MW commencing April 1, 2019.

(B) Blocks. Each year, a portion of the annual increase shall be reserved for new standard offer plants proposed by Vermont retail electricity providers (the provider block), and the remainder shall be reserved for new standard offer plants proposed by persons who are not providers (the independent developer block).

(i) The portion of the annual increase reserved for the provider block shall be 10 percent for the three years commencing April 1, 2013, 15 percent for the three years commencing April 1, 2016, and 20 percent commencing April 1, 2019.

(ii) If the provider block for a given year is not fully subscribed, any unsubscribed capacity within that block shall be added to the annual increase for each following year until that capacity is subscribed and shall be made available to new standard offer plants proposed by persons who are not providers.

(iii) If the independent developer block for a given year is not fully subscribed, any unsubscribed capacity within that block shall be added to the annual increase for each following year until that capacity is subscribed and:

(I) shall be made available to new standard offer plants proposed by persons who are not providers; and

(II) may be made available to a provider following a written request and specific proposal submitted to and approved by the board.

(C) Adjustment; greenhouse gas reduction credits. The board shall adjust the annual increase to account for greenhouse gas reduction credits by multiplying the annual increase by one minus the ratio of the prior year's greenhouse gas reduction credits to that year's statewide retail electric sales.

(i) The amount of the prior year's greenhouse gas reduction credits shall be determined in accordance with subdivision 8006a(a)(2) of this title.

(ii) During years in which the annual increase is 10 MW, the adjustment in the annual increase shall be applied proportionally to the independent developer block and the provider block.

(iii) Greenhouse gas reduction credits used to diminish a provider's obligation under section 8004 of this title may be used to adjust the annual increase under this subsection (c).

(2) Technology allocations. The board shall allocate the 127.5-MW cumulative plant capacity of this subsection among different categories of renewable energy technologies. These categories shall include at least each of the following: methane derived from a landfill; solar power; wind power with a plant capacity of 100 kW or less; wind power with a plant capacity greater than 100 kW; hydroelectric power; and biomass power using a fuel other than methane derived from an agricultural operation or landfill.

(d) Plants outside cumulative capacity. The following categories of plants shall not count toward the cumulative capacity amount of subsection (c) of this section, and the board shall make standard offers available to them provided that they are otherwise eligible for such offers under this section:

(1) Plants using methane derived from an agricultural operation.

(2) New standard offer plants that the board determines will have sufficient benefits to the operation and management of the electric grid or a provider's portion thereof because of their design, characteristics, location, or

any other discernible benefit. To enhance the ability of new standard offer plants to mitigate transmission and distribution constraints, the board shall require Vermont retail electricity providers and companies that own or operate electric transmission facilities within the state to make sufficient information concerning these constraints available to developers who propose new standard offer plants.

(A) By March 1, 2013, the board shall develop a screening framework or guidelines that will provide developers with adequate information regarding constrained areas in which generation having particular characteristics is reasonably likely to provide sufficient benefit to allow the generation to qualify for eligibility under this subdivision (2).

(B) Once the board develops the screening framework or guidelines under subdivision (2)(A) of this subsection (d), the board shall require Vermont transmission and retail electricity providers to make the necessary information publically available in a timely manner, with updates at least annually.

(C) Nothing in this subdivision shall require the disclosure of information in contravention of federal law.

(e) Term. The term of a standard offer required by this section shall be 10 to 20 years, except that the term of a standard offer for a plant using solar power shall be 10 to 25 years.

(f) Price. The categories of renewable energy for which the board shall set standard offer prices shall include at least each of the categories established pursuant to subdivision (c)(2) of this section. The board by order shall determine and set the price paid to a plant owner for each kWh generated under a standard offer required by this section, with a goal of ensuring timely development at the lowest feasible cost. The board shall not be required to make this determination as a contested case under 3 V.S.A. chapter 25.

(1) Market-based mechanisms. For new standard offer projects, the board shall use a market-based mechanism, such as a reverse auction or other procurement tool, to obtain up to the authorized amount of a category of renewable energy, if it first finds that use of the mechanism is consistent with:

(A) applicable federal law; and

(B) the goal of timely development at the lowest feasible cost.

(2) Avoided cost.

(A) The price paid for each category of renewable energy shall be the avoided cost of the Vermont composite electric utility system if the board finds either of the following:

(i) Use of the pricing mechanism described in subdivision (1) (market-based mechanisms) of this subsection (f) is inconsistent with applicable federal law.

(ii) Use of the pricing mechanism described in subdivision (1) (market-based mechanisms) of this subsection (f) is reasonably likely to result in prices higher than the prices that would apply under this subdivision (2).

(B) For the purpose of this subsection (f), the term “avoided cost” means the incremental cost to retail electricity providers of electric energy or capacity or both, which, but for the purchase through the standard offer, such providers would obtain from distributed renewable generation that uses the same generation technology as the category of renewable energy for which the board is setting the price. For the purpose of this subsection (f), the term “avoided cost” also includes the board’s consideration of each of the following:

(i) The relevant cost data of the Vermont composite electric utility system.

(ii) The terms of the contract, including the duration of the obligation.

(iii) The availability, during the system’s daily and seasonal peak periods, of capacity or energy purchased through the standard offer, and the estimated savings from mitigating peak load.

(iv) The relationship of the availability of energy or capacity purchased through the standard offer to the ability of the Vermont composite electric utility system or a portion thereof to avoid costs.

(v) The costs or savings resulting from variations in line losses and other impacts to the transmission or distribution system from those that would have existed in the absence of purchases through the standard offer.

(vi) The supply and cost characteristics of plants eligible to receive the standard offer.

(3) Price determinations. The board shall take all actions necessary to determine the pricing mechanism and implement the pricing requirements of this subsection (f) no later than March 1, 2013 for effect on April 1, 2013. Annually thereafter, the board shall review the determinations previously made under this subsection to decide whether they should be modified in any respect in order to achieve the goal and requirements of this subsection. Any such modification shall be effective on a prospective basis commencing one month after it has been made. Once a pricing determination made or modified under this subsection goes into effect, subsequently executed standard offer contracts shall comply with the most recently effective determination.

(4) Price stability. Once a plant owner has executed a contract for a standard offer under this section, the plant owner shall continue to receive the price agreed on in that contract regardless of whether the board subsequently changes the price applicable to the plant's category of renewable energy.

(g) Qualifying existing agricultural plants. Notwithstanding any other provision of this section, on and after June 8, 2010, a standard offer shall be



available for a qualifying existing plant as defined in Sec. 3 of No. 159 of the Acts of the 2009 Adj. Sess. (2010) (Act 159). The provisions of 30 V.S.A. § 8005(b)(2), as they existed on June 4, 2010, the effective date of Act 159, shall govern a standard offer under this subsection. Standard offers for these plants shall not be subject to subsection (c) of this section (cumulative capacity; new standard offer plants).

(h) Application process. The board shall administer the process of applying for and obtaining a standard offer contract in a manner that ensures that the resources and capacity of the standard offer program are used for plants that are reasonably likely to achieve commissioning.

(i) Interconnection application. No contract under this section for a new standard offer plant shall be executed unless and until the plant owner submits a complete application to interconnect the plant to the subtransmission or distribution system of the applicable retail electricity provider.

(j) Termination; reallocation. In the event a proposed plant accepting a standard offer fails to meet the requirements of the program in a timely manner, the plant's standard offer contract shall terminate, and any capacity reserved for the plant within the program shall be reallocated to one or more eligible plants.

(1) For the purpose of this subsection, the requirements of the program shall include commissioning of all new standard offer plants, except plants

using methane derived from an agricultural operation, within the following periods after execution of the plant's standard offer contract:

(A) 24 months if the plant is solar power or is wind power with a plant capacity of 100 kW or less; and

(B) 36 months if the plant uses a fuel source not described in subdivision 1(A) of this subsection (j) or is wind power of greater than 100 kW capacity.

(2) At the request of a plant owner, the board may extend a period described in subdivision (1) of this subsection (j) if it finds that the plant owner has proceeded diligently and in good faith and that commissioning of the plant has been delayed because of litigation or appeal or because of the need to obtain an approval the timing of which is outside the board's control.

(k) Executed standard offer contracts; transferability; allocation of benefits and costs. With respect to executed contracts for standard offers under this section:

(1) A contract shall be transferable. The contract transferee shall notify the SPEED facilitator of the contract transfer within 30 days of transfer.

(2) The SPEED facilitator shall distribute the electricity purchased to the Vermont retail electricity providers at the price paid to the plant owners, allocated to the providers based on their pro rata share of total Vermont retail kWh sales for the previous calendar year, and the Vermont retail electricity

providers shall accept and pay the SPEED facilitator for the electricity.

However, during any given calendar year:

(A) Calculation of pro rata shares under this subdivision (2) shall include an adjustment in the allocation to a provider if one or more of the provider's customers created greenhouse gas reduction credits under section 8006a of this title that are used to reduce the size of the annual increase under subdivision (c)(1)(C) (adjustment; greenhouse gas reduction credits) of this section. The adjustment shall ensure that any and all benefits or costs from the use of such credits flow to the provider whose customers created the credits. The savings that a provider realizes as a result of this application of greenhouse gas reduction credits shall be passed on proportionally to the customers that created the credits.

(B) A retail electricity provider shall be exempt and wholly relieved from the requirements of this subdivision and subdivision 8005(b)(5) (requirement to purchase standard offer power) of this title if, during the immediately preceding 12-month period ending October 31, the amount of renewable energy supplied to the provider by generation owned by or under contract to the provider, regardless of whether the provider owned the energy's environmental attributes, was not less than the amount of energy sold by the provider to its retail customers.

(3) The SPEED facilitator shall transfer the environmental attributes, including any tradeable renewable energy credits, of electricity purchased under standard offer contracts to the Vermont retail electricity providers in accordance with their pro rata share of the costs for such electricity as determined under subdivision (2) of this subsection (k), except that in the case of a plant using methane from agricultural operations, the plant owner shall retain such attributes and credits to be sold separately at the owner's discretion.

(4) The SPEED facilitator shall transfer all capacity rights attributable to the plant capacity associated with the electricity purchased under standard offer contracts to the Vermont retail electricity providers in accordance with their pro rata share of the costs for such electricity as determined under subdivision (2) of this subsection (k).

(5) All reasonable costs of a Vermont retail electricity provider incurred under this subsection shall be included in the provider's revenue requirement for purposes of ratemaking under sections 218, 218d, 225, and 227 of this title. In including such costs, the board shall appropriately account for any credits received under subdivisions (3) and (4) of this subsection (k). Costs included in a retail electricity provider's revenue requirement under this subdivision shall be allocated to the provider's ratepayers as directed by the board.

(1) SPEED facilitator; expenses; payments. With respect to standard offers under this section, the board shall by rule or order:

(1) Determine a SPEED facilitator's reasonable expenses arising from its role and the allocation of the expenses among plant owners and Vermont retail electricity providers.

(2) Determine the manner and timing of payments by a SPEED facilitator to plant owners for energy purchased under an executed contract for a standard offer.

(3) Determine the manner and timing of payments to the SPEED facilitator by the Vermont retail electricity providers for energy distributed to them under executed contracts for standard offers.

(4) Establish reporting requirements of a SPEED facilitator, a plant owner, and a Vermont retail electricity provider.

(m) Metering. With respect to standard offers under this section, the board shall make rule revisions concerning metering and the allocation of metering costs as needed to implement the standard offer requirements of this section.

(n) Wood biomass. Wood biomass resources that would otherwise constitute qualifying SPEED resources may receive a standard offer under this section only if they have a design system efficiency (the sum of full load design thermal output and electric output divided by the heat input) of at least 50 percent.

(o) Voluntary contracts. The existence of a standard offer under this section shall not preclude a voluntary contract between a plant owner and a

Vermont retail electricity provider on terms that may be different from those under the standard offer. A plant owner who declines a voluntary contract may still accept a standard offer under this section.

(p) Existing hydroelectric plants. Notwithstanding any contrary requirement of this section, no later than January 15, 2013, the board shall make a standard offer contract available to existing hydroelectric plants in accordance with this subsection.

(1) In this subsection:

(A) "Existing hydroelectric plant" means a hydroelectric plant of five MW plant capacity or less that is located in the state, that was in service as of January 1, 2009, that is a qualifying small power production facility under 16 U.S.C. § 796(17)(C) and 18 C.F.R. part 292, and that does not have an agreement with the board's purchasing agent for the purchase of its power pursuant to subdivision 209(a)(8) of this title and board rules adopted under subdivision (8). The term includes hydroelectric plants that have never had such an agreement and hydroelectric plants for which such an agreement has expired, provided that the expiration date is prior to December 31, 2015.

(B) "LIHI" means the Low-Impact Hydropower Institute of Portland, Maine.

(2) The term of a standard offer contract under this subsection shall be 10 or 20 years, at the election of the plant owner.

(3) Unless inconsistent with applicable federal law, the price of a standard offer contract shall be the lesser of the following:

(A) \$0.08 per kWh, adjusted for inflation annually commencing January 15, 2013 using the CPI; or

(B) The sum of the following elements:

(i) a two-year rolling average of the ISO New England Inc. (ISO-NE) Vermont zone hourly locational marginal price for energy;

(ii) a two-year rolling average of the value of the plant's capacity in the ISO-NE forward capacity market;

(iii) the value of avoided line losses due to the plant as a fixed increment of the energy and capacity values;

(iv) the value of environmental attributes, including renewable energy credits; and

(v) the value of a 10- or 20-year contract.

(4) The board shall determine the price to be paid under this section no later than January 15, 2013.

(A) Annually by January 15 commencing in 2014, the board shall recalculate and adjust the energy and capacity elements of the price under subdivisions (3)(B)(i) and (ii) of this subsection (p). The recalculated and adjusted energy and capacity elements shall apply to all contracts executed

under this subdivision, whether or not the contracts were executed prior to the adjustments.

(B) With respect to the price elements specified in subdivisions (3)(B)(iii) (avoided line losses), (iv) (environmental attributes), and (v) (value of long-term contract) of this subsection (p):

(i) These elements shall remain fixed at their values at the time a contract is signed for the duration of the contract, except that the board may periodically adjust the value of environmental attributes that are applicable to an executed contract based upon whether the plant becomes certified by LIHI or loses such certification.

(ii) The board annually may adjust these elements for inclusion in contracts that are executed after the date any such adjustments are made.

(5) In addition to the limits specified in subdivision (3) of this subsection (p), in no event shall an existing hydroelectric plant receive a price in one year higher than its price in the previous year, adjusted for inflation using the CPI, except that if a plant becomes certified by LIHI, the board may add to the price any incremental increase in the value of the plant's environmental attributes resulting from such certification.

(6) Once a plant owner has executed a contract for a standard offer under this subsection (p), the plant owner shall continue to receive the pricing



terms agreed on in that contract regardless of whether the board subsequently changes any pricing terms under this subsection.

(7) Capacity of existing hydroelectric plants executing a standard offer contract under this subsection shall not count toward the cumulative capacity amount of subsection (c) of this section.

(q) Allocation of regulatory costs. The board and department may authorize or retain legal counsel, official stenographers, expert witnesses, advisors, temporary employees, and research services in conjunction with implementing their responsibilities under this section. In lieu of allocating such costs pursuant to subsection 21(a) of this title, the board or department may allocate the expense in the same manner as the SPEED facilitator's costs under subdivision (l)(1) of this section.

Sec. 5. STANDARD OFFER; PRIOR CAPACITY; INTERCONNECTION  
APPLICATION; REPORT

(a) Prior capacity included. In Sec. 4 (SPEED; standard offer program) of this act, the cumulative capacity amount of 127.5 MW contained in 30 V.S.A. § 8005a(c) includes the 50 MW of capacity previously authorized for the standard offer program under 30 V.S.A. § 8005(b)(2) as it existed immediately prior to the effective date of Sec. 4. Portions of this previously authorized 50-MW capacity that become available after that effective date shall be made immediately available to other eligible new standard offer projects, as defined

in Sec. 4 of this act, in addition to the annual increase under 30 V.S.A.

§ 8005a(c)(1) (standard offer; pace). Such capacity:

(1) Shall be made available to new standard offer plants proposed by persons who are not providers; and

(2) May be made available to a provider following a written request and specific proposal submitted to and approved by the board.

(b) Prior capacity; pricing. In a standard offer contract under 30 V.S.A. chapter 89, the board shall use the price that would apply under 30 V.S.A.

§ 8005(b)(2) as it existed immediately prior to the effective date of Sec. 4

(SPEED; standard offer program) of this act, if both of the following apply:

(1) The contract pertains to capacity within the standard offer program as it existed immediately prior to that effective date.

(2) The capacity becomes available and the contract is executed prior to April 1, 2013.

(c) Interconnection application.

(1) No later than September 1, 2012, each owner of a new standard offer plant, as defined in Sec. 4 of this act, that executed or executes a standard offer contract under 30 V.S.A. chapter 89 prior to the effective date of this section shall submit a complete application to interconnect the plant to the subtransmission or distribution system of the applicable retail electricity

provider. Failure to file such an application or to remit any required interconnection fees or deposits shall terminate the contract.

(2) The purpose of this subsection is to provide assurance that any reserved capacity within the standard offer program under 30 V.S.A. chapter 89 is allocated to proposed plants that are likely to be commissioned within the meaning of 30 V.S.A. § 8002.

(d) Prior to the first time that the pricing requirements under Sec. 4 of this act, 30 V.S.A. § 8005a(f) (SPEED; standard offer program; price), are implemented, the public service board in consultation with the department of public service shall review and publish a written report on any factors that have increased the cost to ratepayers, or caused delays in the commissioning, of projects that have accepted a standard offer, relative to other projects within the same category of renewable energy. The report shall include a corrective action plan to reduce costs by addressing these factors, and the implementation of those pricing requirements shall incorporate corrective actions contained in such plan as appropriate and otherwise authorized by law. Before final publication, the board shall conduct a process to receive public comment on the draft report.

\* \* \* Renewable Energy; Reporting \* \* \*

Sec. 6. 30 V.S.A. § 8005b is added to read:

§ 8005b. RENEWABLE ENERGY PROGRAMS; BIENNIAL REPORT

(a) On or before January 15, 2013 and no later than every second January 15 thereafter through January 15, 2033, the board shall file a report with the general assembly in accordance with this section. The board shall prepare the report in consultation with the department. The provisions of 2 V.S.A. § 20(d) (expiration of required reports) shall not apply to the report to be made under this subsection.

(b) The report under this section shall include at least each of the following:

(1) The retail sales, in kWh, of electricity in Vermont during the preceding calendar year. The report shall include the statewide total and the total sold by each retail electricity provider.

(2) The amount of SPEED resources owned by the Vermont retail electricity providers, expressed as a percentage of retail kWh sales. The report shall include the statewide total and the total owned by each retail electricity provider and shall discuss the progress of each provider toward achieving the goals and targets of subsection 8005(d) (SPEED) of this title. The report to be filed under this subsection on or before January 15, 2019 shall discuss and

attach the board's determination under subdivision 8005(d)(2) (2017 SPEED goal) of this title.

(3) A summary of the activities of the SPEED program under section 8005 of this title, including the name, location, plant capacity, and average annual energy generation, of each SPEED resource within the program.

(4) A summary of the activities of the standard offer program under section 8005a of this title, including the number of plants participating in the program, the prices paid by the program, and the plant capacity and average annual energy generation of the participating plants. The report shall present this information as totals for all participating plants and by category of renewable energy technology. The report also shall identify the number of applications received, the number of participating plants under contract, and the number of participating plants actually in service.

(5) An assessment of the energy efficiency and renewable energy markets and recommendations to the general assembly regarding strategies that may be necessary to encourage the use of these resources to help meet upcoming supply requirements.

(6) An assessment of whether Vermont retail electric rates are rising faster than inflation as measured by the CPI, and a comparison of Vermont's electric rates with electric rates in other New England states. If statewide average rates have risen more than 0.2 percentage points per year faster than

inflation over the preceding two or more years, the report shall include an assessment of the contributions to rate increases from various sources, such as the costs of energy and capacity, costs due to construction of transmission and distribution infrastructure, and costs due to compliance with the requirements of section 8005a (SPEED program; standard offer) of this title. Specific consideration shall be given to the price of renewable energy and the diversity, reliability, availability, dispatch flexibility, and full life cycle cost, including environmental benefits and greenhouse gas reductions, on a net present value basis of renewable energy resources available from suppliers. The report shall include any recommendations for statutory change that arise from this assessment. If electric rates have increased primarily due to cost increases attributable to nonrenewable sources of electricity or to the electric transmission or distribution systems, the report shall include a recommendation regarding whether to increase the size of the annual increase described in subdivision 8005a(c)(1) (standard offer; cumulative capacity; pace) of this title.

(7)(A) An assessment of whether strict compliance with the requirements of section 8005a (SPEED program; standard offer) of this title:

(i) Has caused one or more providers to raise its retail rates faster over the preceding two or more years than statewide average retail rates have risen over the same time period;

(ii) Will cause retail rate increases particular to one or more providers; or

(iii) Will impair the ability of one or more providers to meet the public's need for energy services in the manner set forth under subdivision 218c(a)(1) of this title (least-cost integrated planning).

(B) Based on this assessment, consideration of whether statutory changes should be made to grant providers additional flexibility in meeting requirements of section 8005a of this title.

(8) Any recommendations for statutory change related to sections 8005 and 8005a of this title.

\* \* \* Renewable Energy; Further Study \* \* \*

#### Sec. 7. RENEWABLE ENERGY; FURTHER STUDY; REPORT

(a) No later than January 15, 2013, the public service board, in consultation with the commissioner of public service, shall submit a further analysis and report to the general assembly on the following issues related to renewable energy:

(1) Building on its study and report submitted pursuant to Sec. 13a of No. 159 of the Acts of the 2009 Adj. Sess. (2010), further analysis of whether and how to establish a renewable portfolio standard in Vermont, including consideration of allocating such a standard among different categories of renewable energy technologies and of creating, for renewable energy plants, a

tiered system of tradeable renewable energy credits as defined under 30 V.S.A. § 8002 or other incentives that reward increasing levels of efficiency.

(2) Examination of whether and how, either as part of a renewable portfolio standard or through other means, to provide incentives for renewable energy generation that avoids, reduces, or defers transmission or distribution investments, provides baseload power, reduces the overall costs of meeting the public's need for electric energy, or has other beneficial impacts.

(b) The report shall state the board's recommendations and the reasons for those recommendations and shall include the mechanisms that would be required to implement those recommendations.

(c) Prior to completing the report, the board shall afford an opportunity to submit information and comment to affected and interested persons such as business organizations, consumer advocates, energy efficiency entities appointed under Title 30, energy and environmental advocates, relevant state agencies, and Vermont electric and gas utilities. The board may open an investigation in order to meet the requirements of this section and, if so, need not conduct that proceeding as a contested case under 3 V.S.A. chapter 25.



\* \* \* Greenhouse Gas Reduction Credits \* \* \*

Sec. 8. 30 V.S.A. § 8006a is added to read:

§ 8006a. GREENHOUSE GAS REDUCTION CREDITS

(a) Standard offer adjustment. In accordance with this section, greenhouse gas reduction credits generated by an eligible ratepayer shall result in an adjustment of the standard offer under subdivision 8005a(c)(1) of this title (cumulative capacity; pace). For the purpose of adjusting the standard offer under subdivision 8005a(c)(1) of this title, the amount of a year's greenhouse gas reduction credits shall be the lesser of the following:

(1) The amount of greenhouse gas reduction credits created by the eligible ratepayers served by all providers.

(2) The providers' annual retail electric sales during that year to those eligible ratepayers creating greenhouse gas reduction credits.

(b) Definitions. In this section:

(1) "Eligible ratepayer" means a customer of a Vermont retail electricity provider who takes service at 115 kilovolts and has demonstrated to the board that it has a comprehensive energy and environmental management program. Provision of the customer's certification issued under standard 14001 (environmental management systems) of the International Organization for Standardization (ISO) shall constitute such a demonstration.

(2) “Eligible reduction” means a reduction in non-energy-related greenhouse gas emissions from manufacturing processes at an in-state facility of an eligible ratepayer, provided that each of the following applies:

(A) The reduction results from a specific project undertaken by the eligible ratepayer at the in-state facility after January 1, 2012.

(B) The specific project reduces or avoids greenhouse gas emissions above and beyond any reductions of such emissions required by federal and state statutes and rules.

(C) The reductions are quantifiable and verified by an independent third party as approved by the board. Such independent third parties shall be certified by a body accredited by the American National Standards Institute (ANSI) as having a certification program that meets the ISO standards applicable to verification and validation of greenhouse gas assertions.

(3) “Greenhouse gas” shall be as defined under 10 V.S.A. § 552.

(4) “Greenhouse gas reduction credit” means a credit for eligible reductions, calculated in accordance with subsection (c) of this section and expressed as a kWh credit.

(c) Calculation. Greenhouse gas reduction credits shall be calculated as follows:

(1) Eligible reductions shall be quantified in metric tons of CO<sub>2</sub> equivalent, in accordance with the methodologies specified under

40 C.F.R. part 98, and may be counted annually for the life of the specific project that resulted in the reduction.

(2) Metric tons of CO<sub>2</sub> equivalent quantified under subdivision (1) of this subsection shall be converted into units of energy through calculation of the equivalent number of kWh of generation by renewable energy plants, other than biomass, that would be required to achieve the same level of greenhouse gas emission reduction through the displacement of market power purchases. For the purpose of this subdivision, the value of the avoided greenhouse gas emissions shall be based on the aggregate greenhouse gas emission characteristics of system power in the regional transmission area overseen by the Independent System Operator of New England (ISO-NE).

(d) Reporting. An eligible ratepayer shall report to the board annually on each specific project undertaken to create eligible reductions. The board shall specify the required contents of such reports, which shall be publicly available.

(e) Savings. A provider shall pass on savings that it realizes through greenhouse gas reduction credits proportionally to the eligible ratepayers generating the credits.

\* \* \* Renewable Energy Statutes; Technical Corrections \* \* \*

Sec. 9. 30 V.S.A. § 8009 is amended to read:

§ 8009. BASELOAD RENEWABLE POWER PORTFOLIO  
REQUIREMENT

(a) In this section:

(1) “Baseload renewable power” means a plant that generates electricity from renewable energy; that, during normal operation, is capable of taking all or part of the minimum load on an electric transmission or distribution system; and that produces electricity essentially continuously at a constant rate.

(2) “Baseload renewable power portfolio requirement” means an annual average of 175,000 MWh of baseload renewable power from an in-state woody biomass plant that was commissioned prior to September 30, 2009, has a nominal capacity of 20.5 MW, and was in service as of January 1, 2011.

(3) “Biomass” means organic nonfossil material of biological origin constituting a source of renewable energy within the meaning of ~~30 V.S.A. §~~ subdivision 8002(2) of this title.

(4) ~~“Vermont composite electric utility system” means the combined generation, transmission, and distribution resources along with the combined retail load requirements of the Vermont retail electricity providers.~~

\* \* \*

Sec. 10. STATUTORY REVISION

(a) The office of legislative council shall reorganize 30 V.S.A. § 8002 (definitions) so that the definitions are in alphabetical order.

(b) In the Vermont Statutes Annotated, the office of legislative council shall revise each cross-reference to a definition contained in 30 V.S.A. § 8002 so that it refers to the definition as reorganized under subsection (a) of this section.

\* \* \* Utility Planning and Implementation; Consistency with Renewable  
Energy Goals and Targets \* \* \*

Sec. 11. 30 V.S.A. § 218c is amended to read:

§ 218c. LEAST COST INTEGRATED PLANNING

(a)(1) A “least cost integrated plan” for a regulated electric or gas utility is a plan for meeting the public’s need for energy services, after safety concerns are addressed, at the lowest present value life cycle cost, including environmental and economic costs, through a strategy combining investments and expenditures on energy supply, transmission and distribution capacity, transmission and distribution efficiency, and comprehensive energy efficiency programs. Economic costs shall be ~~determined~~ assessed with due regard to:

(A) the greenhouse gas inventory developed under the provisions of 10 V.S.A. § 582;

(B) the state's progress in meeting its greenhouse gas reduction goals; ~~and~~

(C) the value of the financial risks associated with greenhouse gas emissions from various power sources; and

(D) consistency with section 8001 (renewable energy goals) of this title.

(2) "Comprehensive energy efficiency programs" shall mean a coordinated set of investments or program expenditures made by a regulated electric or gas utility or other entity as approved by the board pursuant to subsection 209(d) of this title to meet the public's need for energy services through efficiency, conservation or load management in all customer classes and areas of opportunity which is designed to acquire the full amount of cost effective savings from such investments or programs.

(b) Each regulated electric or gas company shall prepare and implement a least cost integrated plan for the provision of energy services to its Vermont customers. ~~Proposed plans shall be submitted~~ At least every third year on a schedule directed by the public service board, each such company shall submit a proposed plan to the department of public service and the public service board. The board, after notice and opportunity for hearing, may approve a company's least cost integrated plan if it determines that the company's plan complies with the requirements of subdivision (a)(1) of this section and is

reasonably consistent with achieving the goals and targets of subsection 8005(d) (2017 SPEED goal; total renewables targets) of this title.

\* \* \*

Sec. 12. 30 V.S.A. § 248 is amended to read:

§ 248. NEW GAS AND ELECTRIC PURCHASES, INVESTMENTS, AND FACILITIES; CERTIFICATE OF PUBLIC GOOD

\* \* \*

(b) Before the public service board issues a certificate of public good as required under subsection (a) of this section, it shall find that the purchase, investment or construction:

\* \* \*

(2) is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost effective manner through energy conservation programs and measures and energy-efficiency and load management measures, including but not limited to those developed pursuant to the provisions of subsection 209(d), section 218c, and subsection 218(b) of this title. In determining whether this criterion is met, the board shall assess the environmental and economic costs of the purchase, investment, or construction in the manner set out under subdivision 218c(a)(1) (least cost integrated plan) of this title and, as to a generation facility, shall consider

whether the facility will avoid, reduce, or defer transmission or distribution system investments;

\* \* \*

(5) with respect to an in-state facility, will not have an undue adverse effect on esthetics, historic sites, air and water purity, the natural environment, the use of natural resources, and the public health and safety, with due consideration having been given to the criteria specified in 10 V.S.A. §§ 1424a(d) and 6086(a)(1) through (8) and (9)(K) and greenhouse gas impacts;

\* \* \*

(9) with respect to a waste to energy facility, is included in a solid waste management plan adopted pursuant to 24 V.S.A. § 2202a, which is consistent with the state solid waste management plan; ~~and~~

(10) except as to a natural gas facility that is not part of or incidental to an electric generating facility, can be served economically by existing or planned transmission facilities without undue adverse effect on Vermont utilities or customers;

(11) with respect to an in-state generation facility that produces electric energy using woody biomass, will:

(A) comply with the applicable air pollution control requirements under the federal Clean Air Act, 42 U.S.C. § 7401 et seq.;



(B) incorporate commercially available and feasible designs to achieve a reasonable design system efficiency for the type and design of the proposed facility; and

(C) comply with harvesting guidelines and procurement standards that are consistent with the guidelines and standards developed by the secretary of natural resources pursuant to 10 V.S.A. § 2750 (harvesting guidelines and procurement standards).

\* \* \*

(p) An in-state generation facility receiving a certificate under this section that produces electric energy using woody biomass shall annually disclose to the board the amount, type, and source of wood acquired to generate energy.

\* \* \* Total Energy \* \* \*

#### Sec. 13. TOTAL ENERGY; REPORT

(a) The general assembly finds that, in the comprehensive energy plan issued in December 2011, the department of public service recommends that Vermont achieve, by 2050, a goal that 90 percent of the energy consumed in the state be renewable energy. This goal would apply across all energy sectors in Vermont, including electricity consumption, thermal energy, and transportation (total energy).

(b) The commissioner of public service shall convene an interagency and stakeholder working group to study and report to the general assembly on

policies and funding mechanisms that would be designed to achieve the goal described in subsection (a) of this section and the goals of 10 V.S.A. § 578(a) (greenhouse gas emissions) in an integrated and comprehensive manner.

(1) The study and report shall include consideration of:

(A) A total energy standard that would work with and complement the mechanisms enacted in Secs. 3 (SPEED; total renewables targets) and 4 (SPEED; standard offer program) of this act.

(B) The development of an ongoing science-based education and public information campaign for residents of the state at all ages on climate change due to anthropogenic global warming, the potential consequences of climate change, and the ability to reduce or prevent those consequences by replacing greenhouse-gas-emitting energy sources with energy efficiency and renewable energy resources. The study and report shall also consider what specific programs and activities such a campaign would undertake.

(2) The group's report shall include its recommended policy and funding mechanisms and the reasons for the recommendations. The report shall be submitted to the general assembly by December 15, 2013.

(c) Prior to submitting the report to the general assembly, the group shall offer an opportunity to submit information and comment to affected and interested persons such as chambers of commerce or other groups representing business interests, consumer advocates, energy efficiency entities appointed

under Title 30, energy and environmental advocates, fuel dealers, educational institutions, relevant state agencies, transportation-related organizations, and Vermont electric and gas utilities.

\* \* \* Greenhouse Gas Accounting \* \* \*

Sec. 14. 10 V.S.A. § 582 is amended to read:

§ 582. GREENHOUSE GAS INVENTORIES; REGISTRY; ACCOUNTING

\* \* \*

(e) Rules. The secretary may adopt rules to implement the provisions of this section and shall review existing and proposed international, federal, and state greenhouse gas emission reporting programs and make reasonable efforts to promote consistency among the programs established pursuant to this section and other programs, and to streamline reporting requirements on greenhouse gas emission sources. ~~Nothing~~ Except as provided in subsection (g) of this section, nothing in this section shall limit a state agency from adopting any rule within its authority.

(f) Participation by government subdivisions. The state and its municipalities may participate in the inventory for purposes of registering reductions associated with their programs, direct activities, or efforts, including the registration of emission reductions associated with the stationary and mobile sources they own, lease, or operate.

(g) Greenhouse gas accounting. In consultation with the department of public service created under 30 V.S.A. § 1, the secretary shall research and adopt by rule greenhouse gas accounting protocols that achieve transparent and accurate life cycle accounting of greenhouse gas emissions, including emissions of such gases from the use of fossil fuels and from renewable fuels such as biomass. On adoption, such protocols shall be the official protocols to be used by any agency or political subdivision of the state in accounting for greenhouse gas emissions.

\* \* \* Smart Meters \* \* \*

Sec. 15. 30 V.S.A. § 2811 is added to read:

§ 2811. SMART METERS; CUSTOMER RIGHTS; REPORTS

(a) Definitions. As used in this section, the following terms shall have the following meanings:

(1) “Smart meter” means a wired smart meter or a wireless smart meter.

(2) “Wired smart meter” means an advanced metering infrastructure device using a fixed wire for two-way communication between the device and an electric company.

(3) “Wireless smart meter” means an advanced metering infrastructure device using radio or other wireless means for two-way communication between the device and an electric company.

(b) Customer rights. Notwithstanding any law, order, or agreement to the contrary, an electric company may install a wireless smart meter on a customer's premises, provided the company:

(1) provides prior written notice to the customer indicating that the meter will use radio or other wireless means for two-way communication between the meter and the company and informing the customer of his or her rights under subdivisions (2) and (3) of this subsection;

(2) allows a customer to choose not to have a wireless smart meter installed, at no additional monthly or other charge; and

(3) allows a customer to require removal of a previously installed wireless smart meter for any reason and at an agreed-upon time, without incurring any charge for such removal.

(c) Reports. On January 1, 2014 and again on January 1, 2016, the commissioner of public service shall publish a report on the savings realized through the use of smart meters, as well as on the occurrence of any breaches to a company's cyber-security infrastructure. The reports shall be based on electric company data requested by and provided to the commissioner of public service and shall be in a form and in a manner the commissioner deems necessary to accomplish the purposes of this subsection. The reports shall be submitted to the senate committees on finance and on natural resources and

energy and the house committees on commerce and economic development and on natural resources and energy.

(d) Health report.

(1) On or before January 15, 2013, the commissioner of health and the commissioner of public service shall jointly submit a report to the senate committee on finance and the house committee on commerce and economic development. The report shall include: an update of the department of health's 2012 report entitled "Radio Frequency Radiation and Health: Smart Meters"; a summary of the department's activities monitoring the deployment of wireless smart meters in Vermont, including a representative sample of postdeployment radio frequency level testing; and recommendations relating to evidence-based surveillance on the potential health effects of wireless smart meters.

(2) The commissioner of public service, in consultation with the commissioner of health, shall select and retain an independent expert, not an employee of the state, to perform the research and writing of the report identified in subdivision (1) of this subsection. The commissioner of public service may allocate the costs of retaining the independent expert to electric utilities in accordance with sections 20 and 21 of this title (particular proceedings; personnel; assessment of costs).

## Sec. 15a. INSTALLED WIRELESS SMART METERS

If an electric company has installed a wireless smart meter as defined in 30 V.S.A. § 2811(a)(3) prior to the effective date of this act, the company shall provide notice of the installation to the applicable customers, and such notice shall include a statement of customer rights as described under 30 V.S.A. § 2811(b).

\* \* \* Energy Efficiency \* \* \*

Sec. 16. 30 V.S.A. § 209(d)(7) is amended to read:

(7) Net revenues above costs associated with payments from the New England Independent System Operator (ISO-NE) for capacity savings resulting from the activities of the energy efficiency utility designated under subdivision (2) of this subsection shall be deposited into the electric efficiency fund established by this section. Any such net revenues not transferred to the state PACE reserve fund under 24 V.S.A. § 3270(c) shall be used by the entity appointed under subdivision (2) of this subsection to deliver heating and process-fuel energy efficiency services to Vermont consumers of such fuel on a whole-buildings basis to help meet the state's building efficiency goals established by 10 V.S.A. § 581. In delivering such services with respect to heating systems, the entity shall give priority to incentives for the installation of ~~woody~~ high efficiency biomass heating systems and shall have a goal of offering an incentive that is equal to 25 percent of the installed cost of such a

system. For the purpose of this subdivision (7), “~~woody biomass~~” means organic nonfossil material ~~from trees or woody plants~~ constituting a source of renewable energy within the meaning of subdivision 8002(2) of this title. Provision of an incentive under this subdivision (7) for a woody biomass heating system shall not be contingent on the making of other energy efficiency improvements at the property on which the system will be installed.

\* \* \* Harvesting; procurement \* \* \*

Sec. 16a. 10 V.S.A. chapter 87 is added to read:

#### CHAPTER 87. HARVESTING GUIDELINES

#### AND PROCUREMENT STANDARDS

#### § 2750. HARVESTING GUIDELINES AND PROCUREMENT

#### STANDARDS

(a) The secretary of natural resources shall develop voluntary harvesting guidelines that may be used by private landowners to help ensure long-term forest health. These guidelines shall address harvesting that is specifically for wood energy purposes, as well as other harvesting. The secretary may also recommend monitoring regimes as part of these guidelines.

(b) The commissioner of forests, parks and recreation (the commissioner) shall adopt rules or procedures to modify the process of approving forest management plans and forest practices for lands enrolled in the use value appraisal program, established under 32 V.S.A. chapter 124, in order to



address long-term forest health and sustainability. These modifications shall include requirements for preapproval by the commissioner or designee of whole-tree harvesting and for applying the guidelines developed under subsection (a) of this section to harvesting on lands enrolled in the use value appraisal program.

(c) For contracts to harvest wood products on state lands, the commissioner of forests, parks and recreation shall ensure all such harvests are consistent with the purpose of the guidelines developed under subsection (a) of this section, with the objective being long-term forest health in addition to other management objectives.

(d) The secretary of natural resources shall develop a procurement standard that shall be used by the commissioner of buildings and general services in procuring wood products, including biomass for energy in state buildings. All state agencies and departments that use wood energy shall comply with this procurement standard. The procurement standard shall include the voluntary forest health guidelines developed pursuant to subsection (a) of this section. The procurement standard shall recommend methods to:

(1) assure compliance with those forest health guidelines and applicable laws; and

(2) obtain review of potential impacts to natural resources such as rare, threatened, or endangered species, wetlands, wildlife habitat, natural

communities, and forest health and sustainability as defined by the commissioner of forests, parks and recreation in consultation with the commissioner of fish and wildlife.

(e) The procurement standard developed under subsection (d) of this section shall be made available to Vermont educational institutions and other users of biomass energy for their voluntary use.

(f) Working with regional governmental organizations, such as the New England Governors' Conference, Inc. and the Coalition of Northeastern Governors, the secretary of natural resources shall seek to develop and implement regional voluntary harvesting guidelines and a model procurement standard that can be implemented regionwide, consistent with the application of the guidelines, rules, procedures, and standards developed under subsections (a), (b), and (d) of this section.

Sec. 16b. INITIAL ADOPTION

(a) The secretary of natural resources and the commissioner of forests, parks and recreation respectively shall, by January 15, 2013, adopt initial guidelines, rules, procedures, and standards pursuant to Sec. 16m of this act, 10 V.S.A. § 2750(a) (voluntary forest health guidelines), (b) (forest management plans and practices; use value appraisal program), and (d) (procurement standards).

(b) In developing the initial voluntary harvesting guidelines and procurement standards under 10 V.S.A. § 2750(a) and (d), the secretary shall consider the recommendations outlined in the final report of the biomass energy working group, dated January 17, 2012.

(c) The procurement standard adopted under 10 V.S.A. § 2750(d) shall apply to wood product procurement by the commissioner of buildings and general services commencing with new or amended contracts executed after March 1, 2013.

Sec. 16c. 10 V.S.A. § 127 is added to read:

§ 127. RESOURCE MAPPING

(a) On or before January 15, 2013, the secretary of natural resources shall complete resource mapping based on the geographic information system (GIS). The mapping shall identify natural resources throughout the state that may be relevant to the consideration of energy projects. The center for geographic information shall be available to provide assistance to the secretary in carrying out the GIS-based resource mapping.

(b) The secretary of natural resources shall consider the GIS-based resource maps developed under subsection (a) of this section when providing evidence and recommendations to the public service board under 30 V.S.A. § 248(b)(5) and when commenting on or providing recommendations under chapter 151 of this title to district commissions on other projects.

Sec. 16d. DEMONSTRATION PROJECT; COMMUNITY-SUPPORTED  
BIOMASS

There is hereby authorized a biomass energy demonstration project to be implemented in Chittenden County by The Vermont Community Supported Biomass Energy Co-op Corporation in order to explore and showcase the development of community-supported wood pellet harvesting and production in Vermont. This demonstration project is subject to the following requirements:

(1) Purchased biomass shall be subject to forest harvesting guidelines no less stringent than those required for participation in the use value appraisal program authorized under 32 V.S.A. § 3755.

(2) Purchased biomass shall be subject to procurement standards no less stringent than those outlined in the final report of the Biomass Energy Development Working Group dated January 17, 2012.

(3) Pellets produced by the demonstration project shall be labeled as meeting appropriate harvesting guidelines and procurement standards.

(4) Pellets shall be sold to customers, including schools and other institutions, that employ high-efficiency heating appliances.

(5) The Biomass Energy Resource Center's publication from August 2011, titled "A Feasibility Study of Pellet Manufacturing in Chittenden

County, Vermont,” shall inform design and implementation of the demonstration project.

(6) The demonstration project shall provide pellets at a reduced cost to households that meet the income eligibility requirements found in 33 V.S.A. § 2604(a) for home heating fuel assistance in Vermont.

Sec. 16e. 24 V.S.A. § 4412(6) is amended to read:

(6) Heights of renewable energy resource structures. The height of wind turbines with blades less than 20 feet in diameter, or rooftop solar collectors less than 10 feet high on sloped roofs, any of which are mounted on complying structures, shall not be regulated unless the bylaws provide specific standards for regulation. For the purpose of this subdivision, a sloped roof means a roof having a slope of more than five degrees. In addition, the regulation of antennae that are part of a telecommunications facility, as defined in 30 V.S.A. § 248a, may be exempt from review under this chapter according to the provisions of that section.

Sec. 16f. 24 V.S.A. § 4413(g) is amended to read:

(g) Notwithstanding any provision of law to the contrary, a bylaw adopted under this chapter shall not ~~prohibit~~:

(1) Regulate the installation, operation, and maintenance, on a flat roof of an otherwise complying structure, of a solar energy device that heats water

or space or generates electricity. For the purpose of this subdivision, “flat roof” means a roof having a slope less than or equal to five degrees.

(2) Prohibit or have the effect of prohibiting the installation of solar collectors not exempted from regulation under subdivision (1) of this subsection, clotheslines, or other energy devices based on renewable resources.

#### Sec. 17. EFFECTIVE DATES; IMPLEMENTATION

(a) This section and Secs. 1 (renewable energy chapter; goals), 2 (renewable energy chapter; definitions), 3 (SPEED; total renewables targets), 4 (SPEED; standard offer program), 5 (standard offer; prior capacity; interconnection application; report), 7 (renewable energy; further study; report), 8 (greenhouse gas reduction credits), 12 (certificate of public good; findings), 13 (total energy; report), 15 (smart meters; customer rights; reports), 15a (installed wireless smart meters), 16a (harvesting and procurement standards), 16b (initial adoption), 16c (resource mapping) and 16d (community supported biomass) of this act shall take effect on passage.

(b) All sections of this act not referenced in subsections (a) and (e) of this section shall take effect on July 1, 2012.

(c) No later than March 1, 2013, the public service board shall adopt rules or orders sufficient to implement 30 V.S.A. § 8005a(d)(2) (new standard offer plants; transmission and distribution constraints).

(d) No later than September 1, 2013, the secretary of natural resources shall adopt rules pursuant to Sec. 14 of this act, 10 V.S.A. § 582(g) (greenhouse gas accounting).

(e) Secs. 16e (height of renewable energy structures) and 16f (bylaws; solar and other energy devices) of this act shall take effect on passage.

Approved: May 18, 2012