

1 S.170

2 Introduced by Senator Lyons

3 Referred to Committee on

4 Date:

5 Subject: Energy; public service; conservation and development; taxation;

6 education; renewable generation; air pollution; climate change;

7 energy efficiency; fossil heating fuels tax; net zero carbon emissions

8 Statement of purpose: This bill proposes to revise the statutes pertaining to a

9 renewable portfolio standard (RPS) and the Sustainably Priced Energy

10 Enterprise Development (SPEED) program. The bill proposes to establish an

11 RPS in Vermont and continue the SPEED program with significant revisions.

12 The bill also proposes to reorganize existing legal provisions concerning the

13 standard offer component of the SPEED program into a separate statute and

14 increase the existing 50-MW capacity of that program to 100 MW. The bill

15 further proposes to require achievement by 2025 of net-zero carbon emissions

16 from energy consumed in Vermont, to institute a climate change education

17 campaign, and to require other actions to address climate change.

18 An act relating to a renewable portfolio standard, the Sustainably Priced  
19 Energy Enterprise Development Program, and climate change

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



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

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

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

11 (4) “New renewable energy” shall mean renewable energy coming into  
12 service after a specific date and shall have two tiers.

13 (A) “New renewable energy – tier one” means renewable energy  
14 produced by a ~~generating resource~~ plant coming into service after  
15 December 31, 2004 and before January 1, 2013. With respect to a system of  
16 generating ~~resources~~ plants that includes renewable energy, the percentage of  
17 the system that constitutes new renewable ~~energy~~ energy – tier one shall be  
18 determined through dividing the plant capacity of the system’s generating  
19 ~~resources~~ plants coming into service after December 31, 2004 and before  
20 January 1, 2013 that produce renewable energy by the total plant capacity of  
21 the system. “New renewable energy” also may include the additional energy

1 ~~from an existing renewable facility retrofitted with advanced technologies or~~  
2 ~~otherwise operated, modified, or expanded to increase the kWh output of the~~  
3 ~~facility in excess of an historical baseline established by calculating the~~  
4 ~~average output of that facility for the 10-year period that ended December 31,~~  
5 ~~2004. If the production of new renewable energy through changes in~~  
6 ~~operations, modification, or expansion involves combustion of the resource,~~  
7 ~~the system also must result in an incrementally higher level of energy~~  
8 ~~conversion efficiency or significantly reduced emissions. For the purposes of~~  
9 ~~this chapter, renewable energy refers to either “existing renewable energy” or~~  
10 ~~“new renewable energy.”~~

11 (B) “New renewable energy – tier two” means renewable energy  
12 produced by a plant coming into service after December 31, 2012 that  
13 complies with environmental impact standards established by the board. With  
14 respect to a system of generating plants that includes renewable energy, the  
15 percentage of the system that constitutes new renewable energy – tier two shall  
16 be determined through dividing the plant capacity of the system’s generating  
17 plants coming into service after December 31, 2012 that produce renewable  
18 energy and meet the board’s environmental impact standards by the total plant  
19 capacity of the system.

20 (C) “New renewable energy” also may include the additional  
21 renewable energy from an existing plant retrofitted after December 31, 2004

1 with advanced technologies or otherwise operated, modified, or expanded to  
2 increase the kWh output of the plant in excess of an historical baseline. In the  
3 case of a retrofit that came into service after December 31, 2004 and before  
4 January 1, 2013, the historical baseline shall be established by calculating the  
5 average output of that plant for the 10-year period that ended December 31,  
6 2004, and the additional energy shall be considered new renewable  
7 energy – tier one. In the case of a retrofit that came into service after  
8 December 31, 2012, the historical baseline shall be established by calculating  
9 the average output of that plant for the 10-year period that ended December 31,  
10 2012, and the additional energy shall be considered new renewable  
11 energy – tier two. In either case, if the production of new renewable energy  
12 through changes in operations, modification, or expansion involves  
13 combustion of the resource, the system also must result in an incrementally  
14 higher level of energy conversion efficiency or significantly reduced  
15 emissions.

16 (5) “Qualifying SPEED resources” means contracts for ~~in-state~~  
17 resources in the SPEED program established under section 8005 of this title  
18 that would meet the definition of ~~new~~ renewable energy under this section if  
19 the energy purchase under the contracts were to include the energy’s  
20 environmental attributes, whether or not ~~renewable energy credits~~ those  
21 attributes are ~~attached~~ actually purchased under the contracts.

1           (A) “Existing qualifying SPEED resources” means qualifying  
2           SPEED resources that would constitute “existing renewable energy” if the  
3           contracts were to include purchase of the environmental attributes.

4           (B) “New qualifying SPEED resources – tier one” means qualifying  
5           SPEED resources that would constitute “new renewable energy – tier one” if  
6           the contracts were to include purchase of the environmental attributes.

7           (C) “New qualifying SPEED resources – tier two” means qualifying  
8           SPEED resources that would constitute “new renewable energy – tier two” if  
9           the contracts were to include purchase of the environmental attributes.

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

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

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

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

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

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

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

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

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

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

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

12 (13) “Plant capacity” means the rated electrical nameplate for a plant.

13 (14) “Plant owner” means a person who has the right to sell electricity  
14 generated by a plant.

15 (15) “SPEED facilitator” means an entity appointed by the board  
16 pursuant to subdivision 8005(b)(1) of this title.

17 \* \* \*

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



1 Sec. 2. 30 V.S.A. § 8004 is amended to read:

2 § 8004. RENEWABLE PORTFOLIO STANDARDS FOR SALES OF  
3 ELECTRIC ENERGY

4 (a) ~~Except as otherwise provided in section 8005 of this title, in order for~~  
5 ~~Vermont retail electricity providers to~~ To achieve the goals established in  
6 section 8001 of this title, no retail electricity provider shall sell or otherwise  
7 provide or offer to sell or provide electricity in the state of Vermont without  
8 ownership of sufficient ~~energy produced by renewable resources as described~~  
9 ~~in this chapter, or sufficient tradeable renewable energy credits that reflect the~~  
10 ~~required renewable energy~~ environmental attributes as provided for in  
11 subsection (b) of this section. Such ownership may be demonstrated through  
12 possession of tradeable renewable energy credits; contracts for energy supplied  
13 by a plant to the provider if the provider's purchase from the plant includes the  
14 energy's environmental attributes; or both. In the case of members of the  
15 Vermont Public Power Supply Authority, the requirements of this chapter may  
16 be met in the aggregate.

17 (b) ~~Each~~ On and after January 1, 2025, each retail electricity provider in  
18 Vermont shall ~~provide a certain amount of new renewable resources in its~~  
19 ~~portfolio. Subject to subdivision 8005(d)(1) of this title each retail electricity~~  
20 ~~provider in Vermont shall supply an amount of energy equal to its total~~  
21 ~~incremental energy growth between January 1, 2005 and January 1, 2012~~

1 ~~through the use of electricity generated by new renewable resources. The retail~~  
2 ~~electricity provider may meet this requirement through eligible new renewable~~  
3 ~~energy credits, new renewable energy resources with renewable energy credits~~  
4 ~~still attached, or a combination of those credits and resources. No retail~~  
5 ~~electricity provider shall be required to provide in excess of a total of 10~~  
6 ~~percent of its calendar year 2005 retail electric sales with electricity generated~~  
7 ~~by new renewable resources. own the environmental attributes of renewable~~  
8 ~~energy in an amount that is not less than 90 percent of its annual retail electric~~  
9 ~~sales for the preceding calendar year. To meet this requirement, each such~~  
10 ~~provider shall comply with the following schedule:~~

11 (1) As of January 1, 2013, the provider shall own the environmental  
12 attributes of energy from plants in amounts not less than the following  
13 percentages of its retail sales during the immediately preceding calendar year:

14 (A) Existing renewable energy – 40 percent.

15 (B) New renewable energy – tier one – 10 percent.

16 (2) As of January 1, 2017, the provider shall own the environmental  
17 attributes of energy from plants in amounts not less than the following  
18 percentages of its retail sales during the immediately preceding calendar year:

19 (A) Existing renewable energy – 40 percent.

20 (B) New renewable energy – tier one – 10 percent.

21 (C) New renewable energy – tier two – 10 percent.

1           (3) As of January 1, 2021, the provider shall own the environmental  
2 attributes of energy from plants in amounts not less than the following  
3 percentages of its retail sales during the immediately preceding calendar year:

4           (A) Existing renewable energy – 40 percent.

5           (B) New renewable energy – tier one – 10 percent.

6           (C) New renewable energy – tier two – 20 percent.

7           (4) As of January 1, 2025, the provider shall own the environmental  
8 attributes of energy from plants in amounts not less than the following  
9 percentages of its retail sales during the immediately preceding calendar year:

10          (A) Existing renewable energy – 40 percent.

11          (B) New renewable energy – tier one – 10 percent.

12          (C) New renewable energy – tier two – 40 percent.

13          (5) At each date stated in subdivisions (2) through (4) of this subsection,  
14 energy owned by a provider to satisfy the requirements of those subdivisions  
15 pertaining to new renewable energy – tier two shall comply with the category  
16 allocations established by the board under subsection (d) of this section.

17          ~~(c) The requirements of subsection (b) of this section shall apply to all~~  
18 ~~retail electricity providers in this state, unless the retail electricity provider~~  
19 ~~demonstrates and the board determines that compliance with the standard~~  
20 ~~would impair the provider's ability to meet the public's need for energy~~  
21 ~~services after safety concerns are addressed, at the lowest present value life~~

1 ~~cycle cost, including environmental and economic costs.~~ The use of energy  
2 from a plant to satisfy the requirements of section 8005 of this title shall not  
3 preclude the use of the same energy to satisfy the requirements of this section,  
4 as long as the provider possesses the energy's environmental attributes.

5 (d) The board shall provide, by order or rule, the regulations and  
6 procedures that are necessary to allow the board and the department to  
7 implement and supervise further the implementation and maintenance of a  
8 renewable portfolio standard. These orders or rules shall:

9 (1) Establish minimum environmental impact standards necessary to  
10 establish that a plant qualifies as new renewable energy – tier two.

11 (2) Rank categories of renewable energy plants that meet those  
12 minimum environmental impact standards according to their relative degrees  
13 of environmental impacts.

14 (3) Establish category allocations within new renewable energy – tier  
15 two that give preference to those categories of renewable energy plants that  
16 have the lowest environmental impacts.

17 (e) In lieu of, ~~or in addition to~~ purchasing tradeable renewable energy  
18 credits, to satisfy the portfolio requirements of this section, a retail electricity  
19 provider in this state may pay to the Vermont clean energy development fund  
20 established under section 8015 of this title an amount not less than the number  
21 of kWh necessary to bring the provider's portfolio into compliance with those

1 ~~requirements multiplied by a rate of \$0.03 per kWh as established by the board~~  
2 ~~(2012 dollars). As an alternative, the board may require any proportion of this~~  
3 ~~amount to be paid to the energy conservation fund established under subsection~~  
4 ~~209(d) of this title.~~

5 ~~(f) Before December 30, 2007 and biennially thereafter through~~  
6 ~~December 30, 2013, the board shall file a report with the senate committees on~~  
7 ~~finance and on natural resources and energy and the house committees on~~  
8 ~~commerce and on natural resources and energy. The report shall include the~~  
9 ~~following:~~

10 ~~(1) the total cumulative growth in electric energy usage in Vermont~~  
11 ~~from 2005 through the end of the year that precedes the date on which the~~  
12 ~~report is due;~~

13 ~~(2) a report on the market for tradeable renewable energy credits,~~  
14 ~~including the prices at which credits are being sold;~~

15 ~~(3) a report on the SPEED program, and any projects using the program;~~

16 ~~(4) a summary of other contracts held or projects developed by Vermont~~  
17 ~~retail electricity providers that are likely to be eligible under the provisions of~~  
18 ~~subsection 8005(d) of this title;~~

19 ~~(5) an estimate of potential effects on rates, economic development and~~  
20 ~~jobs, if the target established in subsection 8005(d) of this section is met, and if~~  
21 ~~it is not met;~~

1           ~~(6) an assessment of the supply portfolios of Vermont retail electricity~~  
2 ~~providers, and the resources available to meet new supply requirements likely~~  
3 ~~to be triggered by the expiration of major power supply contracts;~~

4           ~~(7) an assessment of the energy efficiency and renewable energy~~  
5 ~~markets and recommendations to the legislature regarding strategies that may~~  
6 ~~be necessary to encourage the use of these resources to help meet upcoming~~  
7 ~~supply requirements;~~

8           ~~(8) any recommendations for statutory change related to this section,~~  
9 ~~including recommendations for rewarding utilities that make substantial~~  
10 ~~investments in SPEED resources; and~~

11           ~~(9) the board's recommendations on how the state might best continue~~  
12 ~~to meet the goals established in section 8001 of this title, including whether the~~  
13 ~~state should meet its growth in energy usage over the succeeding 10 years by a~~  
14 ~~continuation of the SPEED program.~~

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

16       § 8005. SUSTAINABLY PRICED ENERGY ENTERPRISE

17               DEVELOPMENT (SPEED) PROGRAM

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

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

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

10 (2) Issue standard offers for qualifying SPEED resources ~~with a plant~~  
11 ~~capacity of 2.2 MW or less~~ in accordance with section 8005a of this title.  
12 ~~These standard offers shall be available until the cumulative plant capacity of~~  
13 ~~all such resources commissioned in the state that have accepted a standard~~  
14 ~~offer under this subdivision (2) equals or exceeds 50 MW; provided, however,~~  
15 ~~that a plant owned and operated by a Vermont retail electricity provider shall~~  
16 ~~count toward this 50 MW ceiling if the plant has a plant capacity of 2.2 MW or~~  
17 ~~less and is commissioned on or after September 30, 2009. The term of a~~  
18 ~~standard offer required by this subdivision (2) shall be 10 to 20 years, except~~  
19 ~~that the term of a standard offer for a plant using solar power shall be 10 to 25~~  
20 ~~years. The price paid to a plant owner under a standard offer required by this~~

1 ~~subdivision shall include an amount for each kWh generated that shall be set as~~  
2 ~~follows:~~

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

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

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

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

10 ~~(iv) For a plant using hydropower, wind power with a plant~~  
11 ~~capacity greater than 15 kW, or biomass power that is not subject to~~  
12 ~~subdivision (2)(A)(i) of this subsection, a price equal, at the time of the plant's~~  
13 ~~commissioning, to the average residential rate per kWh charged by all of the~~  
14 ~~state's retail electricity providers weighted in accordance with each such~~  
15 ~~provider's share of the state's electric load.~~

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

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



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

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

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

11                  ~~(II) The board shall include a rate of return on equity not less~~  
12                  ~~than the highest rate of return on equity received by a Vermont investor owned~~  
13                  ~~retail electric service provider under its board approved rates as of the date a~~  
14                  ~~standard offer goes into effect.~~

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

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

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

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

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

19                   (C) ~~On or before January 15, 2012 and on or before every second~~  
20 ~~January 15 after that date, the board shall review the prices set under~~  
21 ~~subdivision (2)(B) of this subsection and determine whether such prices are~~

1 ~~providing sufficient incentive for the rapid development and commissioning of~~  
2 ~~plants. In the event the board determines that such a price is inadequate or~~  
3 ~~excessive, the board shall reestablish the price, in accordance with the~~  
4 ~~requirements of subdivision (2)(B)(i) of this subsection, for effect on a~~  
5 ~~prospective basis commencing two months after the price has been~~  
6 ~~reestablished.~~

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

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

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

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

19 ~~(I) The plant was commissioned on or before September 30,~~  
20 ~~2009.~~

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

3                   ~~(III) On or before September 30, 2009, the plant owner had a~~  
4                   ~~contract with a Vermont retail electricity provider to supply energy or~~  
5                   ~~attributes, including tradeable renewable energy credits from the plant, in~~  
6                   ~~connection with a renewable energy pricing program approved under section~~  
7                   ~~8003 of this title.~~

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

11                  ~~(iii) Award of a standard offer under this subdivision (2)(F) shall~~  
12                  ~~be on condition that the plant owner and the retail electricity provider agree to~~  
13                  ~~modify any existing contract between them described under subdivision (i)(III)~~  
14                  ~~of this subdivision (2)(F) so that the contract no longer requires energy from~~  
15                  ~~the plant to be provided to the retail electricity provider. Those provisions of~~  
16                  ~~such a contract that concern tradeable renewable energy credits associated with~~  
17                  ~~the plant may remain in force.~~

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

1           ~~(G) Notwithstanding the requirement of this subsection (b) that a~~  
2           ~~standard offer be available for qualifying SPEED resources, the board shall~~  
3           ~~make a standard offer available under this subdivision (2) to an existing~~  
4           ~~hydroelectric plant that does not exceed the 2.2 MW plant capacity limit of this~~  
5           ~~subsection. To such plants, the board shall not allocate more of the cumulative~~  
6           ~~50 MW plant capacity under this subdivision (2) than exceeds the amount of~~  
7           ~~such capacity that is unsubscribed as of January 1, 2012. Before making this~~  
8           ~~standard offer available, the board shall notify potentially eligible plants~~  
9           ~~known to it and shall publish broad public notice of the future availability of~~  
10           ~~the standard offer. The notice shall direct that all potentially eligible plants~~  
11           ~~shall file with the board a statement of interest in the standard offer by a date to~~  
12           ~~be no less than 30 days from the date of the notice. No plant may participate in~~  
13           ~~this standard offer unless it timely files such a statement. The filing of such a~~  
14           ~~statement shall constitute the consent of the plant owner to produce such~~  
15           ~~information as the board may reasonably require to carry out this subdivision~~  
16           ~~(2)(G), including information the board deems necessary to determine a~~  
17           ~~generic cost in setting the price. The board shall have authority to require the~~  
18           ~~production of such information from a plant that files a statement of interest.~~  
19           ~~For the purpose of this subdivision (2)(G):~~

20                   ~~(i) “Existing hydroelectric plant” means a hydroelectric plant~~  
21           ~~located in the state that was in service as of January 1, 2009 and does not, as of~~

1 ~~the effective date of this subdivision (2)(G), have an agreement with the~~  
2 ~~board's purchasing agent for the purchase of its power pursuant to subdivision~~  
3 ~~209(a)(8) of this title and board rules adopted under that subdivision. The term~~  
4 ~~includes hydroelectric plants that have never had such an agreement and~~  
5 ~~hydroelectric plants for which such an agreement expired prior to May 25,~~  
6 ~~2011.~~

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

9 ~~(I) The term "generic cost," when applied by the board to~~  
10 ~~determine the price of a standard offer for an existing hydroelectric plant, shall~~  
11 ~~mean the cost to own, reliably operate, and maintain such a plant for the~~  
12 ~~duration of the standard offer contract. In determining this cost, the board shall~~  
13 ~~consider including a generic assumption with respect to rehabilitation costs~~  
14 ~~based on relevant factors such as the age of the potentially eligible plants;~~  
15 ~~recently constructed or currently proposed rehabilitations to such plants; the~~  
16 ~~investment that a reasonably prudent person would have made in such a plant~~  
17 ~~to date under the circumstances of the plant, including the price received for~~  
18 ~~power; and the availability for such a plant of improved technology.~~

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

1           (3) Maximize the benefit to rate payers from the sale of tradeable  
2 renewable energy credits or other credits that may be developed in the future,  
3 especially with regard to those plants that accept the standard offer issued  
4 under ~~subdivision (2) of this subsection~~ section 8005a of this title.

5           (4) Encourage retail electricity provider and third party developer  
6 sponsorship and partnerships in the development of renewable energy projects.

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

13           (6) Establish a method for Vermont retail electrical providers to obtain  
14 beneficial ownership of the renewable energy credits associated with any  
15 SPEED projects, ~~in the event that a renewable portfolio standard comes into~~  
16 ~~effect under the provisions of section 8004 of this title. It shall be a condition~~  
17 ~~of a standard offer required to be issued under subdivision (2) of this~~  
18 ~~subsection that tradeable renewable energy credits associated with a plant that~~  
19 ~~accepts the standard offer are owned by the retail electric providers purchasing~~  
20 ~~power from the plant, except that in the case of a plant using methane from~~

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

3 (7) ~~Create a mechanism by which a retail electricity provider may~~  
4 ~~establish that it has a sufficient amount of renewable energy, or resources that~~  
5 ~~would otherwise qualify under the provisions of subsection (d) of this section,~~  
6 ~~in its portfolio so that equity requires that the retail electricity provider be~~  
7 ~~relieved, in whole or in part, from requirements established under this~~  
8 ~~subsection that would require a retail electricity provider to purchase SPEED~~  
9 ~~power, provided that this mechanism shall not apply to the requirement to~~  
10 ~~purchase power under subdivision (5) of this subsection. However, a retail~~  
11 ~~electricity provider that establishes that it receives at least 25 percent of its~~  
12 ~~energy from qualifying SPEED resources that were in operation on or before~~  
13 ~~September 30, 2009, shall be exempt and wholly relieved from the~~  
14 ~~requirements of subdivisions (b)(5) (requirement to purchase standard offer~~  
15 ~~power) and (g)(2) (allocation of standard offer electricity and costs) of this~~  
16 ~~section. [Repealed.]~~

17 (8) Provide that in any proceeding under subdivision 248(a)(2)(A) of  
18 this title, a demonstration of compliance with subdivision 248(b)(2) of this  
19 title, relating to establishing need for the facility, shall not be required if the  
20 facility is a SPEED resource and if no part of the facility is financed directly or



1 indirectly through investments, other than power contracts, backed by Vermont  
2 electricity ratepayers.

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

5 (c) Developers of qualifying ~~and nonqualifying~~ SPEED resources shall be  
6 entitled to classification as an eligible facility under ~~chapter 12 of Title~~  
7 10 V.S.A. chapter 12, relating to the Vermont Economic Development  
8 Authority.

9 (d)(1) ~~The board shall meet on or before January 1, 2012 and open a~~  
10 ~~proceeding to determine the total amount of qualifying SPEED resources that~~  
11 ~~have been supplied to Vermont retail electricity providers or have been issued~~  
12 ~~a certificate of public good. If the board finds that the amount of qualifying~~  
13 ~~SPEED resources coming into service or having been issued a certificate of~~  
14 ~~public good after January 1, 2005 and before July 1, 2012 equals or exceeds~~  
15 ~~total statewide growth in electric retail sales during that time, and in addition,~~  
16 ~~at least five percent of the 2005 total statewide electric retail sales is provided~~  
17 ~~by qualified SPEED resources or would be provided by qualified SPEED~~  
18 ~~resources that have been issued a certificate of public good, or if it finds that~~  
19 ~~the amount of qualifying SPEED resources equals or exceeds 10 percent of~~  
20 ~~total statewide electric retail sales for calendar year 2005, the portfolio~~  
21 ~~standards established under this chapter shall not be in force. The board shall~~

1 ~~make its determination by January 1, 2013. If the board finds that the goal~~  
2 ~~established has not been met, one year after the board's determination the~~  
3 ~~portfolio standards established under subsection 8004(b) of this title shall take~~  
4 ~~effect.~~

5 ~~(2) A state goal is to assure that 20 percent of total statewide electric~~  
6 ~~retail sales before July 1, 2017 shall be generated by SPEED resources. The~~  
7 ~~board shall report to the house and senate committees on natural resources and~~  
8 ~~energy and to the joint energy committee by December 31, 2011 with regard to~~  
9 ~~the state's progress in meeting this goal. In addition, the board shall report to~~  
10 ~~the house and senate committees on natural resources and energy and to the~~  
11 ~~joint energy committee by December 31, 2013 with regard to the state's~~  
12 ~~progress in meeting this goal and, if necessary, shall include any appropriate~~  
13 ~~recommendations for measures that will make attaining the goal more likely.~~

14 ~~(3) For the purposes of the determination to be made under this~~  
15 ~~subsection, electricity produced at all facilities owned by or under long term~~  
16 ~~contract to Vermont retail electricity providers, whether it is generated inside~~  
17 ~~or outside Vermont, that is new renewable energy shall be counted in the~~  
18 ~~calculations under subdivisions (1) and (2) of this subsection.~~

19 To achieve the goals established in section 8001 of this title, no retail  
20 electricity provider shall sell or otherwise provide or offer to sell or provide

1 electricity in the state of Vermont without ownership of sufficient qualifying  
2 SPEED resources in accordance with this subsection.

3 (1) On and after January 1, 2025, each retail electricity provider in  
4 Vermont shall own qualifying SPEED resources in an amount that is not less  
5 than 90 percent of its annual retail electric sales for the preceding calendar year  
6 and that includes the provider's pro rata share, in accordance with section  
7 8005a of this title, of those qualifying SPEED resources that have accepted  
8 standard offer contracts and for which the SPEED facilitator is allocating costs  
9 to the retail electricity providers.

10 (2) To achieve the requirements of subdivision (1) of this subsection,  
11 each such provider shall comply with the following schedule:

12 (A) As of January 1, 2013, the provider shall own qualifying SPEED  
13 resources in amounts not less than the following percentages of its retail sales  
14 during the immediately preceding calendar year:

15 (i) Existing qualifying SPEED resources – 40 percent.

16 (ii) New qualifying SPEED resources – tier one – 10 percent.

17 (B) As of January 1, 2017, the provider shall own qualifying SPEED  
18 resources in amounts not less than the following percentages of its retail sales  
19 during the immediately preceding calendar year:

20 (i) Existing qualifying SPEED resources – 40 percent.

21 (ii) New qualifying SPEED resources – tier one – 10 percent.

1                   (iii) New qualifying SPEED resources – tier two – 10 percent.

2                   (C) As of January 1, 2021, the provider shall own qualifying SPEED  
3 resources in amounts not less than the following percentages of its retail sales  
4 during the immediately preceding calendar year:

5                   (i) Existing qualifying SPEED resources – 40 percent.

6                   (ii) New qualifying SPEED resources – tier one – 10 percent.

7                   (iii) New qualifying SPEED resources – tier two – 20 percent.

8                   (D) As of January 1, 2025, the provider shall own qualifying SPEED  
9 resources in amounts not less than the following percentages of its retail sales  
10 during the immediately preceding calendar year:

11                   (i) Existing qualifying SPEED resources – 40 percent.

12                   (ii) New qualifying SPEED resources – tier one – 10 percent.

13                   (iii) New qualifying SPEED resources – tier two – 40 percent.

14                   (E) At each date stated in subdivisions (A) through (D) of this  
15 subdivision (2), a retail electricity provider's portfolio shall contain, in  
16 accordance with the provider's pro rata share under section 8005a of this title,  
17 qualifying SPEED resources as of that date that have accepted standard offer  
18 contracts and for which the SPEED facilitator is allocating costs to the retail  
19 electricity providers.

20                   (3) This subsection does not require that a retail electricity provider own  
21 the environmental attributes of qualifying SPEED resources. Plants used to

1 satisfy this subsection may differ from plants used to satisfy the requirements  
2 of section 8004 (renewable portfolio standard) of this title.

3 (e) The board shall provide, by order or rule, the regulations and  
4 procedures that are necessary to allow the board and the department to  
5 implement, and to supervise further the implementation and maintenance of the  
6 SPEED program. These rules shall assure that decisions with respect to  
7 certificate of public good applications for qualifying SPEED resources shall be  
8 made in a timely manner.

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

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

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

18 ~~(2) The SPEED facilitator shall distribute the electricity purchased to the~~  
19 ~~Vermont retail electricity providers at the price paid to the plant owners,~~  
20 ~~allocated to the providers based on their pro rata share of total Vermont retail~~

1 kWh sales for the previous calendar year, and the Vermont retail electricity  
2 providers shall accept and pay the SPEED facilitator for the electricity.

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

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

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

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

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

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

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

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

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

18           ~~(j) Wood biomass resources that would otherwise constitute qualifying~~  
19 ~~SPEED resources may receive a standard offer under subdivision (b)(2) of this~~  
20 ~~section only if they have a design system efficiency (the sum of full load~~

1 design thermal output and electric output divided by the heat input) of at least  
2 50 percent.

3 ~~(k) A Vermont retail electricity provider shall not be eligible for a standard~~  
4 ~~offer contract under subdivision (b)(2) of this section. However, under~~  
5 ~~subdivision (g)(1) of this section, a plant owner may transfer to such a provider~~  
6 ~~all rights associated with a standard offer contract that has been offered to the~~  
7 ~~plant without affecting the plant's status under the standard offer program. In~~  
8 ~~the case of such a transfer of rights, the plant shall not be considered a utility-~~  
9 ~~owned and -operated plant under subdivisions (b)(2) and (g)(2) of this section.~~

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

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



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

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

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

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

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

15       § 8005a. SPEED; STANDARD OFFER PROGRAM

16            (a) To achieve the goals of section 8001 of this title, the board shall issue  
17       standard offers for qualifying SPEED resources located in Vermont with a  
18       plant capacity of 2.2 MW or less. These standard offers shall be available until  
19       the cumulative plant capacity of all such resources commissioned in the state  
20       that have accepted a standard offer under this section equals or exceeds 100  
21       MW; provided, however, that a plant owned and operated by a Vermont retail

1 electricity provider shall count toward this 50-MW amount if the plant has a  
2 plant capacity of 2.2 MW or less and is commissioned on or after  
3 September 30, 2009. The board shall implement these standard offers through  
4 the SPEED facilitator.

5 (1) To be eligible for such a standard offer, a plant must be a qualifying  
6 SPEED resource – tier one or a qualifying SPEED resource – tier two and must  
7 constitute a qualifying small power production facility under 16 U.S.C.  
8 § 796(17)(C) and 18 C.F.R. part 292.

9 (2) The board shall implement the standard offer program in a manner  
10 that supports multiple categories of renewable energy technologies. The board  
11 shall set, within the program, relative percentages of these categories and shall  
12 administer the program to achieve an allocation of plants receiving standard  
13 offer contracts that reasonably corresponds to these percentages. Categories of  
14 renewable energy technologies to be supported by the standard offer program  
15 shall include at least each of the following: methane derived from an  
16 agricultural operation or landfill; solar power; wind power with a plant  
17 capacity of 15 kW or less; wind power with a plant capacity greater than 15  
18 kW; hydropower; and biomass power using a fuel other than methane derived  
19 from an agricultural operation or landfill.

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

4       (c) The board by order shall set the price paid to a plant owner under a  
5       standard offer required by this section that shall include an amount for each  
6       kWh generated and that shall vary by category of renewable energy. The price  
7       paid for each category shall be the avoided cost of the Vermont composite  
8       electric utility system. The board shall not be required to make this  
9       determination as a contested case under 3 V.S.A. chapter 25. The categories of  
10       renewable energy for which the board shall set standard offer prices shall  
11       include at least each of the categories described in subdivision (a)(2) of this  
12       section.

13       (1) For the purpose of this subsection, the term “avoided cost” means  
14       the incremental cost to retail electricity providers of electric energy or capacity  
15       or both, which, but for the purchase from the plant proposed to receive a  
16       standard offer, such providers would obtain from a source using the same  
17       generation technology as the proposed plant. For the purpose of this  
18       subsection, the term “avoided cost” also includes the board’s consideration of  
19       each of the following:

20               (A) The relevant cost data of the Vermont composite electric utility  
21       system.

1           (B) The terms of the contract, including the duration of the  
2 obligation.

3           (C) The availability, during the system's daily and seasonal peak  
4 periods, of capacity or energy from a proposed plant.

5           (D) The relationship of the availability of energy or capacity from the  
6 proposed plant to the ability of the Vermont composite electric utility system  
7 or a portion thereof to avoid costs.

8           (E) The costs or savings resulting from variations in line losses from  
9 those that would have existed in the absence of purchases from the proposed  
10 plant.

11           (F) The supply and cost characteristics of the proposed plant.

12           (2) Every six months, the board shall review the prices previously set  
13 under this subsection and determine whether such prices remain in compliance  
14 with subdivision (1) of this subsection. The board may delegate this review to  
15 the SPEED facilitator and, in such instance, the SPEED facilitator shall  
16 provide the board with a recommended determination and the board shall make  
17 the final determination. In the event the board determines that such a price  
18 must be revised to comply with those criteria, the board shall reestablish the  
19 price in accordance with those criteria for effect on a prospective basis  
20 commencing one month after the price has been reestablished.

1           (3) Once the board determines, under subdivision (1) or (2) of this  
2           subsection, the standard offer price to be paid for a category of renewable  
3           energy, the price paid to a plant owner under a subsequently executed standard  
4           offer contract shall comply with that determination.

5           (4) A plant owner who has executed a contract for a standard offer under  
6           this section prior to a determination by the board under subdivision (2) of this  
7           subsection shall continue to receive the price agreed on in that contract.

8           (d) Notwithstanding any other provision of this section, on and after June 8,  
9           2010, a standard offer shall be available for a qualifying existing plant in  
10           accordance with this subsection.

11           (1) For the purpose of this subsection, “qualifying existing plant” means  
12           a plant that meets all of the following:

13                   (A) The plant was commissioned on or before September 30, 2009.

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

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

20           (2) The provisions of subdivision 8005(b)(2) of this title as they existed  
21           on June 4, 2010, the effective date of No. 159 of the Acts of the 2009 Adj.

1 Sess. (2010), shall govern a standard offer under this subsection. Plant  
2 capacity of a plant accepting a standard offer pursuant to subsection shall not  
3 be counted toward the 50-MW amount described in subdivision (a) of this  
4 section.

5 (e) Notwithstanding any other provision of this section, the board shall  
6 make a standard offer available to an existing hydroelectric plant in accordance  
7 with this subsection.

8 (1) For the purpose of this subsection, “existing hydroelectric plant”  
9 means a hydroelectric plant of 2.2 MW plant capacity or less located in the  
10 state that was in service as of January 1, 2009 and did not, as of May 25, 2011,  
11 have an agreement with the board’s purchasing agent for the purchase of its  
12 power pursuant to subdivision 209(a)(8) of this title and board rules adopted  
13 under that subdivision. The term includes hydroelectric plants that have never  
14 had such an agreement and hydroelectric plants for which such an agreement  
15 expired prior to May 25, 2011.

16 (2) The provisions of subdivision 8005(b)(2) of this title, as they existed  
17 on May 25, 2011, the effective date of Sec. 8 of No. 47 of the Acts of 2011,  
18 shall govern a standard offer under this subsection.

19 (f) With respect to executed contracts for standard offers under this section:

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

1           (2) The SPEED facilitator shall distribute the electricity purchased to the  
2 Vermont retail electricity providers at the price paid to the plant owners,  
3 allocated to the providers based on their pro rata share of total Vermont retail  
4 kWh sales for the previous calendar year, and the Vermont retail electricity  
5 providers shall accept and pay the SPEED facilitator for the electricity.  
6 However, a retail electricity provider that establishes that it receives at least 25  
7 percent of its energy from qualifying SPEED resources that were in operation  
8 on or before September 30, 2009, shall be exempt and wholly relieved from the  
9 requirements of this subdivision and subdivision 8005(b)(5) (requirement to  
10 purchase standard offer power) of this title.

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

18           (4) The SPEED facilitator shall transfer all capacity rights attributable to  
19 the plant capacity associated with the electricity purchased under standard  
20 offer contracts to the Vermont retail electricity providers in accordance with

1 their pro rata share of the costs for such electricity as determined under  
2 subdivision (2) of this subsection.

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

10 (g) With respect to standard offers under this section, the board shall by  
11 rule or order:

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

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

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



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

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

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

11           (j) A Vermont retail electricity provider shall not be eligible for a standard  
12           offer contract under this section. However, under subdivision (f)(1) of this  
13           section, a plant owner may transfer to such a provider all rights associated with  
14           a standard offer contract that has been offered to the plant without affecting the  
15           plant's status under the standard offer program.

16           (k) The existence of a standard offer under this section shall not preclude a  
17           voluntary contract between a plant owner and a Vermont retail electricity  
18           provider on terms that may be different from those under the standard offer. A  
19           plant owner who declines a voluntary contract may still accept a standard offer  
20           under this section.

1 Sec. 5. 30 V.S.A. § 8005b is added to read:

2 § 8005b. RENEWABLE ENERGY PROGRAMS; BIENNIAL REPORT

3 (a) On or before January 15, 2013 and no later than every second  
4 January 15 thereafter through January 15, 2027, the board shall file a report  
5 with the general assembly in accordance with this section.

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

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

11 (2) The amount of environmental attributes of renewable energy owned  
12 by the Vermont retail electricity providers, expressed as a percentage of retail  
13 kWh sales. The report shall include the statewide total and the total owned by  
14 each retail electricity provider. The report shall discuss the progress of each  
15 provider in meeting the requirements of section 8004 of this title.

16 (3) The amount of qualifying SPEED resources owned by the Vermont  
17 retail electricity providers, expressed as a percentage of retail kWh sales. The  
18 report shall include the statewide total and the total owned by each retail  
19 electricity provider. The report shall discuss the progress of each provider  
20 meeting the requirements of section 8005 of this title.

1           (4) A summary of the activities of the SPEED program under section  
2           8005 of this title, including the name, location, plant capacity, and average  
3           annual energy generation, of each qualifying SPEED resource used to meet the  
4           requirements of section 8005.

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

13           (6) A report on the market for tradeable renewable energy credits,  
14           including the prices at which credits are being sold.

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

19           (8) Any recommendations for statutory change related to sections 8004,  
20           8005, and 8005a of this title.

1 Sec. 6. 30 V.S.A. § 8009 is amended to read:

2 § 8009. BASELOAD RENEWABLE POWER PORTFOLIO

3 REQUIREMENT

4 (a) In this section:

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

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

13 (3) "Biomass" means organic nonfossil material of biological origin  
14 constituting a source of renewable energy within the meaning of 30 V.S.A.  
15 § 8002(2).

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

19 (b) ~~Notwithstanding subsection 8004(a) and subdivision 8005(d)(1) of this~~  
20 ~~title, commencing~~ Commencing November 1, 2012, the electricity supplied by  
21 each Vermont retail electricity provider to its customers shall include the

1 provider's pro rata share of the baseload renewable power portfolio  
2 requirement, which shall be based on the total Vermont retail kWh sales of all  
3 such providers for the previous calendar year. The obligation created by this  
4 subsection shall cease on November 1, 2022.

5 \* \* \*

6 (f) With respect to a plant used to satisfy the baseload renewable power  
7 portfolio requirement:

8 (1) The SPEED facilitator shall purchase the baseload renewable power,  
9 and the electricity purchased and any associated costs shall be allocated by the  
10 SPEED facilitator to the Vermont retail electricity providers based on their pro  
11 rata share of total Vermont retail kWh sales for the previous calendar year, and  
12 the Vermont retail electricity providers shall accept and pay those costs.

13 (2) Any environmental attributes, including tradeable renewable energy  
14 credits ~~attributable to,~~ of the electricity purchased shall be transferred to the  
15 Vermont retail electricity providers in accordance with their pro rata share of  
16 the costs for such electricity as determined under subdivision (1) of this  
17 subsection. The ownership of any such attributes shall be included, as existing  
18 renewable energy, in determining the providers' compliance with their  
19 obligations under section 8004 (renewable portfolio standard) of this title.

20 \* \* \*

1 Sec. 7. 30 V.S.A. § 8015 is amended to read:

2 § 8015. VERMONT CLEAN ENERGY DEVELOPMENT FUND

3 (a) Creation of fund.

4 (1) There is established the Vermont clean energy development fund to  
5 consist of each of the following:

6 (A) The proceeds due the state under the terms of the memorandum  
7 of understanding between the department of public service and Entergy  
8 Nuclear VY and Entergy Nuclear Operations, Inc. that was entered under  
9 public service board docket 6812; together with the proceeds due the state  
10 under the terms of any subsequent memoranda of understanding entered before  
11 July 1, 2005 between the department of public service and Entergy Nuclear  
12 VY and Entergy Nuclear Operations, Inc.

13 (B) All payments made by a retail electricity provider pursuant to  
14 subsection 8004(e) of this title.

15 (C) Any other monies that may be appropriated to or deposited into  
16 the fund.

17 (2) Balances in the fund shall be expended solely for the purposes set  
18 forth in this subchapter and shall not be used for the general obligations of  
19 government. All balances in the fund at the end of any fiscal year shall be  
20 carried forward and remain part of the fund. Interest earned by the fund shall

1 be deposited in the fund. This fund is established in the state treasury pursuant  
2 to ~~subchapter 5 of chapter 7 of Title 32 V.S.A. chapter 7, subchapter 5.~~

3 \* \* \*

4 \* \* \* Climate Change; Net Zero Emissions; Carbon Accounting \* \* \*

5 Sec. 8. 10 V.S.A. § 578 is amended to read:

6 § 578. GREENHOUSE GAS REDUCTION ~~GOALS~~; NET ZERO

7 EMISSIONS

8 (a) ~~General goal of greenhouse~~ Greenhouse gas reduction. ~~It is the goal of~~  
9 ~~the~~ The state to shall reduce emissions of greenhouse gases from within the  
10 geographical boundaries of the state and those emissions outside the  
11 boundaries of the state that are caused by the use of energy in Vermont ~~in order~~  
12 ~~to make an appropriate contribution to achieving the regional goals of reducing~~  
13 ~~emissions of greenhouse gases from the 1990 baseline by:~~

14 (1) ~~25 percent by January 1, 2012;~~

15 (2) ~~50 percent by January 1, 2028;~~

16 (3) ~~if practicable using reasonable efforts, 75 percent by January 1, 2050~~

17 to net zero by January 1, 2025. As of that date, at least 90 percent of the  
18 energy consumed in Vermont shall constitute renewable energy within the  
19 meaning of 30 V.S.A. § 8002(2), and the generation of any and all greenhouse  
20 gases due to energy consumed in Vermont shall be matched by natural in-state  
21 carbon sequestration practices.

1 (b) Vermont climate collaborative. The secretary will participate in the  
2 Vermont climate collaborative, a collaboration between state government and  
3 Vermont's higher education, business, agricultural, labor, and environmental  
4 communities. Wherever possible, members of the collaborative shall be  
5 included among the membership of the program development working groups  
6 established by the climate change oversight committee created under this act.  
7 State entities shall cooperate with the climate change oversight committee in  
8 pursuing the priorities identified by the committee. The secretary shall notify  
9 the general public that the collaborative is developing greenhouse gas  
10 reduction programs and shall provide meaningful opportunity for public  
11 comment on program development. Programs shall be developed in a manner  
12 that implements subsection (a) of this section and state energy policy, as  
13 specified in 30 V.S.A. § 202a.

14 (c) Implementation of state programs to ~~reduce~~ achieve net zero  
15 greenhouse gas emissions. ~~In order to facilitate the state's compliance with the~~  
16 ~~goals established in this section, all state agencies shall consider, whenever~~  
17 ~~practicable, any increase or decrease in greenhouse gas emissions~~

18 (1) The secretary, the department of public service created under  
19 30 V.S.A. § 1, the public service board created under 30 V.S.A. § 3, the agency  
20 of transportation created under 19 V.S.A. § 2, and all agencies of the state  
21 whose activities affect energy use shall achieve the requirements of subsection



1 (a) of this section through adoption and enforcement of rules, including rules  
2 requiring greenhouse gas emission reductions; provision of incentives for  
3 energy efficiency or renewable energy; decision-making on the issuance of  
4 permits, certificates, and other approvals; implementation of programs  
5 developed by the Vermont climate collaborative; and other means. The state  
6 shall include its plan to achieve the requirements of subsection (a) of this  
7 section in the comprehensive energy plan and updates to that plan pursuant to  
8 30 V.S.A. § 202b.

9 (2) All agencies of the state shall conform to subsection (a) of this  
10 section in their decision-making procedures with respect to the purchase and  
11 use of equipment and goods; the siting, construction, and maintenance of  
12 buildings; the assignment of personnel; and the planning, design, and operation  
13 of programs, services, and infrastructure.

14 (d) Advocacy for cap and trade program for greenhouse gases, including  
15 those caused by transportation, heating, cooling, and ventilation. In order to  
16 increase the likelihood of the state meeting the goals established under this  
17 section, the public service board, the secretary of natural resources, and the  
18 commissioner of public service shall advocate before appropriate regional or  
19 national entities and working groups in favor of the establishment of a regional  
20 or national cap and trade program for greenhouse gas emissions, including  
21 those caused by transportation, heating, cooling, and ventilation. This may

1 take the form of an expansion of the existing regional greenhouse gas initiative  
2 (RGGI), or it may entail the creation of an entirely new and separate regional  
3 or national cap and trade initiative that includes a 100 percent consumer  
4 allocation system.

5 Sec. 9. 10 V.S.A. § 580(a) is amended to read:

6 (a) It is a goal of the state, by the year 2025, to produce at least 25 percent  
7 of the energy consumed within the state through the use of renewable energy  
8 sources, particularly from Vermont's farms and forests, in a manner that  
9 supports and is consistent with the requirements of subsection 578(a) of this  
10 title. It is also a goal of the state, by the year 2020, that at least 50 percent of  
11 the diesel fuel consumed in the state be biodiesel as defined in subdivision  
12 585(a)(2) of this title.

13 Sec. 10. 10 V.S.A. § 581 is amended to read:

14 § 581. BUILDING EFFICIENCY GOALS

15 It shall be goals of the state:

16 (1) To improve substantially the energy fitness of at least 20 percent of  
17 the state's housing stock by 2017 (more than 60,000 housing units), and 25  
18 percent of the state's housing stock by 2020 (approximately 80,000 housing  
19 units).

20 (2) To reduce annual fuel needs and fuel bills by an average of 25  
21 percent in the housing units served.

1           (3) To reduce total fossil fuel consumption across all buildings ~~by an~~  
2 ~~additional one half percent~~ each year, leading to a total reduction of ~~six~~ 10  
3 percent annually by 2017 and ~~10 percent annually~~ compliance with the  
4 requirements of subsection 578(a) (greenhouse gas emissions) of this title by  
5 2025.

6           (4) To save Vermont families and businesses a total of \$1.5 billion on  
7 their fuel bills over the lifetimes of the improvements and measures installed  
8 between 2008 and 2017.

9           (5) To increase weatherization services to low income Vermonters by  
10 expanding the number of units weatherized, or the scope of services provided,  
11 or both, as revenue becomes available in the home weatherization assistance  
12 trust fund.

13       Sec. 11. 10 V.S.A. § 582 is amended to read:

14       § 582. GREENHOUSE GAS INVENTORIES; REGISTRY; CARBON  
15           ACCOUNTING

16       (a) Inventory and forecasting. The secretary shall work, in conjunction  
17 with other states or a regional consortium, to establish a periodic and consistent  
18 inventory of greenhouse gas emissions. The secretary shall publish a Vermont  
19 greenhouse gas emission inventory and forecast by no later than June 1, 2010,  
20 and updates shall be published annually until 2028, until a regional or national  
21 inventory and registry program is established in which Vermont participates, or

1 until the federal National Emissions Inventory includes mandatory greenhouse  
2 gas reporting.

3 (b) Inventory updates. To develop the inventory under this section, the  
4 secretary, in coordination with the secretaries of administration, of  
5 transportation, of agriculture, food and markets, and of commerce and  
6 community development, and the commissioner of the department of public  
7 service, shall aggregate all existing statewide data on greenhouse gas emissions  
8 currently reported to state or federal entities, existing statewide data on  
9 greenhouse gas sinks, and otherwise publicly available data. Greenhouse gas  
10 emissions data that is more than 36 months old shall be updated either by  
11 statistical methods or seeking updated information from the reporting agency  
12 or department. The information shall be standardized to reflect the emissions  
13 in tons per ~~CO<sub>2</sub>~~ CO<sub>2</sub> equivalent, shall be set out in the inventory by sources or  
14 sectors such as agriculture, manufacturing, automobile emissions, heating, and  
15 electricity production, shall be compatible with the inventory included with the  
16 governor's commission on climate change final report and shall include, ~~but~~  
17 ~~not be limited to,~~ the following sources:

18 (1) information collected for reporting in the National Emissions  
19 Inventory, which includes air toxics, criteria pollutants, mobile sources, point  
20 sources, and area sources;

1           (2) in-state electricity production using RGGI and state permit  
2 information;

3           (3) vehicle miles travelled and vehicle registration data; and

4           (4) agricultural activities, including livestock and crop practices.

5           (c) Forecast. The secretary shall use best efforts to forecast statewide  
6 emissions for a five- and ten-year period based on the inventory data and other  
7 publicly available information.

8           (d) Registry. The secretary shall work, in conjunction with other states or a  
9 regional consortium, to establish a regional or national greenhouse gas registry.

10           (1) Any registry in which Vermont participates shall be designed to  
11 apply to the entire state and to as large a geographic area beyond state  
12 boundaries as is possible.

13           (2) It shall accommodate as broad an array of sectors, sources, facilities  
14 and approaches as is possible, and shall allow sources to start as far back in  
15 time as is permitted by good data, affirmed by third-party verification.

16           (e) Rules. The secretary may adopt rules to implement the provisions of  
17 this section and shall review existing and proposed international, federal, and  
18 state greenhouse gas emission reporting programs and make reasonable efforts  
19 to promote consistency among the programs established pursuant to this  
20 section and other programs, and to streamline reporting requirements on

1 greenhouse gas emission sources. Nothing in this section shall limit a state  
2 agency from adopting any rule within its authority.

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

8 (g) Carbon accounting. In consultation with the department of public  
9 service created under 30 V.S.A. § 1, the secretary shall research and adopt  
10 greenhouse gas accounting protocols that achieve transparent and accurate  
11 accounting of carbon emissions. These protocols shall be used in all state  
12 programs and activities that affect greenhouse gas emissions, including all  
13 actions taken to achieve the requirements of subsection 578(a) of this title.

14 \* \* \* Climate Change; State Planning and Policy \* \* \*

15 Sec. 12. 3 V.S.A. § 2291(c) is amended to read:

16 (c) The secretary of administration with the cooperation of the  
17 commissioners of public service and of buildings and general services shall  
18 develop and oversee the implementation of a state agency energy plan for state  
19 government. The plan shall be adopted by June 30, 2005, modified as  
20 necessary, and readopted by the secretary on or before January 15, 2010 and

1 each ~~sixth~~ third year subsequent to 2010. The plan shall accomplish the  
2 following objectives and requirements:

3 (1) To conserve resources, save energy, and reduce pollution. The plan  
4 shall devise strategies to identify to the greatest extent feasible, all  
5 opportunities for conservation of resources through environmentally and  
6 economically sound infrastructure development, purchasing, and fleet  
7 management, and investments in renewable energy and energy efficiency  
8 available to the state which are cost effective on a life cycle cost basis.

9 (2) To consider state policies and operations that affect energy use.

10 (3) To devise a strategy to implement or acquire all prudent  
11 opportunities and investments in as prompt and efficient a manner as possible.

12 (4) To include appropriate provisions for monitoring resource and  
13 energy use and evaluating the impact of measures undertaken.

14 (5) To identify education, management, and other relevant policy  
15 changes that are a part of the implementation strategy.

16 (6) To devise a strategy to reduce greenhouse gas emissions. The plan  
17 shall include steps to encourage more efficient trip planning, to reduce the  
18 average fuel consumption of the state fleet, and to encourage alternatives to  
19 solo-commuting state employees for commuting and job-related travel.

20 (7) To provide, where feasible, for the installation of renewable energy  
21 systems including solar energy systems, which shall include equipment or

1 building design features, or both, designed to attain the optimal mix of  
2 minimizing solar gain in the summer and maximizing solar gain during the  
3 winter, as part of the new construction or major renovation of any state  
4 building. The cost of implementation and installation will be identified as part  
5 of the budget process presented to the general assembly.

6 (8) To achieve compliance with the requirements of 10 V.S.A. § 578(a)  
7 (greenhouse gas emissions).

8 Sec. 13. 30 V.S.A. § 202a is amended to read:

9 § 202a. STATE ENERGY POLICY

10 It is the ~~general~~ policy of the state of Vermont:

11 (1) To assure, to the greatest extent practicable, that Vermont can meet  
12 its energy service needs in a manner that is adequate, reliable, secure, and  
13 sustainable; that assures affordability and encourages the state's economic  
14 vitality, continuing and substantial reductions in the generation of pollution,  
15 including greenhouse gases, the efficient use of energy resources and cost  
16 effective demand side management; and that is environmentally sound.

17 (2) To identify and evaluate on an ongoing basis, resources that will  
18 meet Vermont's energy service needs in accordance with the principles of least  
19 cost integrated planning; and the requirements of 10 V.S.A. § 578(a)  
20 (greenhouse gas emissions), including efficiency, conservation, and load



1 management alternatives, wise use of renewable resources, and  
2 environmentally sound energy supply.

3 Sec. 14. 30 V.S.A. § 202b is amended to read:

4 § 202b. STATE COMPREHENSIVE ENERGY PLAN; CLIMATE  
5 CHANGE EDUCATION PLAN

6 (a) The department of public service, in conjunction with other state  
7 agencies designated by the governor, shall prepare a comprehensive state  
8 energy plan covering at least a 20-year period. The plan shall seek to  
9 implement the state energy policy set forth in section 202a of this title. The  
10 plan shall include:

11 (1) A comprehensive analysis and projections regarding the use, cost,  
12 supply, and environmental effects of all forms of energy resources used within  
13 Vermont, and regarding all pollution including greenhouse gases generated by  
14 energy consumed within the state, including the state's progress in meeting the  
15 greenhouse gas emission requirements established in 10 V.S.A. § 578(a).

16 (2) Recommendations for state implementation actions, regulation,  
17 legislation, and other public and private action to carry out the comprehensive  
18 energy plan. These recommendations shall include the state's implementation  
19 plan to achieve the requirements of 10 V.S.A. § 578(a) (greenhouse gas  
20 emissions), developed in consultation with all agencies described in  
21 subsection 578(a).

1           (3) A plan for public education on climate change in conformance with  
2 subsection (e) of this section.

3           (b) In developing or updating the plan's recommendations, the department  
4 of public service shall:

5           (1) Prior to issuing the plan or update for public review:

6           (A) Consider and incorporate as appropriate the regional planning  
7 commissions' recommendations to date pursuant to 24 V.S.A. § 4345a(19)  
8 (climate change; triennial process and recommendations) and their  
9 energy-related recommendations pursuant to 24 V.S.A. § 4348a (elements of  
10 regional plan).

11           (B) Notify all regional planning commissions and request that they  
12 engage in the public process and issuance of written recommendations  
13 described in 24 V.S.A. § 4345a(19)(A) and (B) (climate change).

14           (2) ~~seek~~ Seek public comment by holding public hearings in at least five  
15 different geographic regions of the state on at least three different dates, and by  
16 providing notice through publication once a week and at least seven days apart  
17 for two or more successive weeks in a newspaper or newspapers of general  
18 circulation in the regions where the hearings will be held, and by delivering  
19 notices to all licensed commercial radio and television stations with  
20 transmitting facilities within the state, plus Vermont Public Radio and  
21 Vermont Educational Television.

1 (c) The department shall adopt a state energy plan by no later than  
2 January 1, 1994. Upon adoption of the plan, analytical portions of the plan  
3 may be updated annually. The plan's implementation recommendations shall  
4 be updated by the department no less frequently than every ~~five~~ three years.  
5 These recommendations shall be updated prior to the expiration of ~~five~~ three  
6 years if the general assembly passes a joint resolution making a request to that  
7 effect. If the department proposes or the general assembly requests the  
8 revision of implementation recommendations, the department shall hold public  
9 hearings on the proposed revisions.

10 (d) Any distribution of the plan to members of the general assembly shall  
11 be in accordance with the provisions of 2 V.S.A. § 20.

12 (e) The department shall develop, coordinate, and oversee an ongoing  
13 science-based education plan and public information campaign on climate  
14 change due to anthropogenic global warming and the urgent need to replace  
15 greenhouse gas-emitting energy sources with energy efficiency and renewable  
16 energy resources.

17 (1) In developing and implementing the plan and education campaign,  
18 the department shall coordinate with relevant state agencies, the state's  
19 regional planning commissions, educational institutions at all educational  
20 levels, and local energy committees, including the agencies of commerce and  
21 community development, of natural resources, and of transportation; the public

1 service board; the state board of education; the state department of education;  
2 the governor's climate cabinet; the Vermont climate change collaborative; the  
3 University of Vermont; the Vermont State Colleges; each efficiency entity  
4 appointed under 30 V.S.A. § 209(d)(2); representatives of K–12 educational  
5 institutions; and the Vermont Energy Climate Action Network.

6 (2) The campaign shall disseminate information, including public  
7 service announcements, articles, and videos, through digital, broadcast, and  
8 print media.

9 (3) In collaboration with the state board of education under 16 V.S.A.  
10 § 164(21), the campaign shall promote development and use of science-based  
11 K–12 curricula on the climate change issues addressed by this subsection.

12 (4) In collaboration with the University of Vermont and the Vermont  
13 State Colleges, the campaign shall promote development and use of  
14 science-based college and graduate level curricula on the climate change issues  
15 addressed by this subsection.

16 Sec. 15. 16 V.S.A. § 164 is amended to read:

17 § 164. STATE BOARD, GENERAL POWERS AND DUTIES

18 The state board shall have supervision over, and management of the  
19 department of education and the public school system, except as otherwise  
20 provided; and shall:

21 \* \* \*

1           (21) In consultation with the departments of education and of public  
2           service, educators, local energy committees, and other relevant persons and  
3           entities, develop or cause the development of one or more science-based K–12  
4           curricula on the issue of climate change due to anthropogenic global warming  
5           and the replacement of greenhouse gas-emitting energy sources with energy  
6           efficiency and renewable energy resources. These curricula shall be developed  
7           in collaboration with the public education campaign described in 30 V.S.A.  
8           § 202b(d) (public education; climate change), shall be published on the web  
9           site of the department of education, and shall be implemented in Vermont  
10           educational institutions that provide elementary education or secondary  
11           education or both. The board of education periodically shall update the  
12           curricula as appropriate.

13       Sec. 16. 16 V.S.A. § 2171 is amended to read:

14       § 2171. CORPORATION ESTABLISHED; PURPOSES; POWERS

15           (a) There is hereby created as a part of the educational system of the state  
16           of Vermont a public corporation to be known as “Vermont State Colleges,”  
17           which shall plan, supervise, administer and operate facilities for education  
18           above the high school level supported in whole or in substantial part with state  
19           funds; however, while the corporation shall maintain cooperative relations with  
20           the University of Vermont and State Agricultural College, nothing in this

1 chapter shall give the corporation any responsibility for the planning,  
2 supervision, administration or operation of the university.

3 (b) The corporation shall own the real and personal property of the  
4 Castleton, Johnson, and Lyndon teachers colleges and the Vermont  
5 Agricultural and Technical Institute and of other state operated institutions of  
6 higher education which may be established. It shall protect, preserve and  
7 improve the property and promote its use as institutions of higher education.

8 (c) The corporation may acquire, hold and dispose of property in fee or in  
9 trust, or any other estate, except as provided in subsection (d) of this section,  
10 shall have a common seal and shall be an instrumentality of the state for the  
11 purposes set forth in this section. The state of Vermont shall support and  
12 maintain the corporation.

13 (d) The corporation shall not abandon, lease, sell or dispose of any of the  
14 institutions under its control unless such action is specifically authorized by the  
15 general assembly. The terms of any such sale, lease or other disposal shall be  
16 prescribed by the agency of administration, with the approval of the governor,  
17 within the terms of the authorization of the general assembly.

18 (e) The corporation may make expenditures for capital improvements. The  
19 corporation is authorized to borrow money for building purposes, to give  
20 security therefor as may be required, to execute necessary or proper  
21 instruments in connection therewith, and is also authorized to accept, use, and

1 administer such funds as may be made available to it for any of its corporate  
2 purposes by the United States or any of its agencies, and to agree to any terms  
3 and conditions with reference thereto which may be required thereby not  
4 inconsistent with its corporate purposes.

5 (f) The corporation shall collaborate with the University of Vermont under  
6 section 2285 of this title and the public education campaign described in  
7 30 V.S.A. § 202b(d) (public education; climate change) in the development of  
8 an interdisciplinary curriculum on the issue of climate change due to  
9 anthropogenic global warming and the replacement of greenhouse gas-emitting  
10 energy sources with energy efficiency and renewable energy resources. The  
11 corporation shall cause this curriculum to be offered at the Vermont State  
12 Colleges.

13 Sec. 17. 16 V.S.A. § 2285 is added to read:

14 § 2285. CLIMATE CHANGE CURRICULUM

15 The University of Vermont and State Agricultural College shall develop  
16 and offer an interdisciplinary curriculum on the issue of climate change due to  
17 anthropogenic global warming and the replacement of greenhouse gas-emitting  
18 energy sources with energy efficiency and renewable energy resources. This  
19 curriculum shall be developed in collaboration with the Vermont State  
20 Colleges pursuant to subsection 2171(f) of this title and the public education  
21 campaign described in 30 V.S.A. § 202b(d) (public education; climate change).

1                   \* \* \* Climate Change; Regional Planning \* \* \*

2       Sec. 18. 24 V.S.A. § 4345a is amended to read:

3       § 4345a. DUTIES OF REGIONAL PLANNING COMMISSIONS

4           A regional planning commission created under this chapter shall:

5                                   \* \* \*

6           (19) Concerning the issues of climate change caused by anthropogenic  
7       global warming and the replacement of greenhouse gas-emitting energy  
8       sources with energy efficiency and renewable energy resources:

9           (A) No less than every three years, hold public meetings and solicit  
10       comments and recommendations for local, regional, and state action from  
11       persons within the region, such as member municipalities and local energy  
12       committees, to achieve the requirements of 10 V.S.A. § 578(a) (greenhouse gas  
13       emissions).

14           (B) No less than every three years, and after engaging in the public  
15       process described in subdivision (A) of this subdivision (19), issue written  
16       recommendations for local, regional, and state action to achieve the  
17       requirements of 10 V.S.A. § 578(a) (greenhouse gas emissions), and supply  
18       those recommendations to member municipalities, the department of public  
19       service, and the agencies of commerce and community development and of  
20       natural resources.





1 greenhouse gas-emitting energy sources with energy efficiency and renewable  
2 energy resources; and

3 (B) ~~may~~ May include an analysis of energy resources, needs,  
4 scarcities, costs, and problems within the region, a further statement of policy  
5 on the conservation of energy and the development of renewable energy  
6 resources, and a statement of policy on patterns and densities of land use and  
7 control devices likely to result in conservation of energy;

8 (4) A transportation element, which:

9 (A) Shall include the specific policies and recommendations of the  
10 regional planning commission to reduce the emissions, within the region, of  
11 greenhouse gases from vehicular transportation, while still meeting the  
12 region's transportation needs; and

13 (B) ~~may consist of~~ May include a statement of present and  
14 prospective transportation and circulation facilities, and a map showing  
15 existing and proposed highways, including limited access highways, and  
16 streets by type and character of improvement, and where pertinent, anticipated  
17 points of congestion, parking facilities, transit routes, terminals, bicycle paths  
18 and trails, scenic roads, airports, railroads and port facilities, and other similar  
19 facilities or uses, and recommendations to meet future needs for such facilities,  
20 with indications of priorities of need, costs, and method of financing;

21 \* \* \*

1 Sec. 20. 24 V.S.A. § 4348b is amended to read:

2 § 4348b. READOPTION OF REGIONAL PLANS

3 (a) Unless they are readopted, all regional plans, including all prior  
4 amendments, shall expire every eight years.

5 (b)(1) A regional plan that has expired or is about to expire may be  
6 readopted as provided under section 4348 of this title for the adoption of a  
7 regional plan or amendment. Prior to any readoption, the regional planning  
8 commission shall prepare an assessment report which shall be submitted to the  
9 agency of commerce and community development, the department of public  
10 service, the agency of natural resources, and the municipalities within the  
11 region. The assessment report shall include an evaluation of the energy  
12 element of the plan and the progress within the region toward achieving the  
13 requirements of 10 V.S.A. § 578(a) (greenhouse gas emissions) and any  
14 amendments necessary to ensure that those requirements are met for  
15 greenhouse gas emissions in the region. The assessment report also may  
16 include:

17 (A) the extent to which the plan has been implemented since  
18 adoption or readoption;

19 (B) an evaluation of the goals and policies and any amendments  
20 necessary due to changing conditions of the region;

1 (C) an evaluation of the land use element and any amendments  
2 necessary to reflect changes in land use within the region or changes to  
3 regional goals and policies;

4 (D) priorities for implementation in the next five years; and

5 (E) updates to information and data necessary to support goals and  
6 policies.

7 (2) The readopted plan shall remain in effect for the ensuing eight years  
8 unless earlier readopted.

9 (c) Upon the expiration of a regional plan under this section, the regional  
10 plan shall be of no further effect in any other proceeding.

11 (d) All regional plans that expire after July 1, 1991 shall be readopted to be  
12 consistent with planning goals and shall follow the review process referred to  
13 in No. 200 of the Acts of the ~~of~~ 1987 Adj. Sess. (1988).

14 \* \* \* Climate Change; Fossil Fuel Efficiency; Tax \* \* \*

15 Sec. 21. 30 V.S.A. § 209(d)(9) is added to read:

16 (9) Revenues from the fossil heating fuel efficiency tax pursuant to  
17 32 V.S.A. § 8801 shall be deposited into the electric efficiency fund  
18 established by this section and shall be used by the entity appointed under  
19 subdivision (2) of this subsection to support delivery of cost-effective energy  
20 efficiency services on a whole buildings basis, including weatherization  
21 services, to Vermont heating and process fuel consumers. The board shall

1 allocate the delivery of services under this subdivision among Vermonters of  
2 all income levels, taking into account the delivery of weatherization services  
3 pursuant to 33 V.S.A. chapter 25 (home weatherization assistance program).  
4 Prior to deciding this allocation, the board shall provide notice and an  
5 opportunity to comment to affected persons and entities such as the department  
6 of public service, the office of economic opportunity, and each efficiency  
7 entity appointed under subdivision (2) of this subsection.

8 Sec. 22. 30 V.S.A. § 209(e) is amended to read:

9 (e) The board shall:

10 \* \* \*

11 (15) Ensure that the energy efficiency programs implemented under this  
12 section are designed to make continuous and proportional progress toward  
13 attaining the overall state building efficiency goals established by 10 V.S.A.  
14 § 581, by promoting all forms of energy end-use efficiency and comprehensive  
15 sustainable building design. The funds made available under ~~subdivision~~  
16 ~~(d)(7)~~ subdivisions (d)(7)–(9) of this section may be used by an efficiency  
17 entity appointed under subdivision (2) of this section to deliver fossil fuel  
18 energy efficiency services to Vermont heating and process-fuel consumers on a  
19 whole-building basis.

20 (16) Ensure that each efficiency entity appointed under subdivision (2)  
21 of this subsection successfully implements programs that result, by January 1,

1 2025, in the use of solar water heating in each residence in the state and the  
2 discontinuance of fossil fuel water heating in each such residence.

3 Sec. 23. 32 V.S.A. chapter 217 is added to read:

4 CHAPTER 217. FOSSIL HEATING FUEL EFFICIENCY TAX

5 § 8801. FOSSIL HEATING FUEL EFFICIENCY TAX

6 (a) In addition to the fuel gross receipts tax under 33 V.S.A. § 2503, there  
7 is imposed a tax of five percent of the cost per gallon, up to a maximum of  
8 \$0.125 per gallon, on the retail sale of the following types of fuel by sellers:

9 (1) heating oil, kerosene, and other dyed diesel fuel delivered to a  
10 residence or business;

11 (2) propane;

12 (3) natural gas;

13 (4) coal.

14 (b) The tax shall be levied upon and collected quarterly from the seller.

15 (c) The tax shall be administered by the commissioner of taxes, who shall  
16 prescribe the manner in which a seller who uses a volumetric unit other than a  
17 gallon shall convert the per-gallon tax to the unit used by the seller. All  
18 receipts shall be deposited by the commissioner in the energy efficiency fund  
19 created under 30 V.S.A. § 209(d)(4). All provisions of law relating to the  
20 collection, administration, and enforcement of the sales and use tax imposed by  
21 chapter 233 of this title shall apply to the tax imposed by this section.

1       Sec. 24. EFFECTIVE DATE; IMPLEMENTATION

2           (a) This act shall take effect on passage, except that Sec. 20 (readoption of  
3       regional plan) of this act shall take effect on July 2, 2012.

4           (b) No later than January 1, 2013:

5           (1) The public service board shall issue its first set of prices under Sec. 4  
6       of this act, 30 V.S.A. § 8005a(c) (standard offer program). The six-month  
7       periods described in Sec. 4 of this act, 30 V.S.A § 8005a(c)(2), shall  
8       commence on issuance of that first set of prices.

9           (2) The agency of natural resources shall adopt carbon accounting  
10       protocols pursuant to Sec. 11 of this act, 10 V.S.A. § 582(g) (greenhouse  
11       gas — inventories; registry; carbon accounting).

12           (3) Each regional planning commission shall complete its first triennial  
13       process and written recommendations pursuant to Sec. 18 of this act, 24 V.S.A.  
14       § 4345a(19) (climate change; public process and recommendations).

15           (c) No later than July 1, 2013:

16           (1) The department of public service shall complete the process to issue  
17       and shall issue the initial implementation plan required by Secs. 8, 10 V.S.A.  
18       § 578(c), and 14, 30 V.S.A. § 202b(2), of this act (implementation plan, net  
19       zero greenhouse gas emissions).

1           (2) The secretary of administration shall complete the process to revise  
2           and shall issue a revision to the state agency energy plan to comply with  
3           Sec. 12 of this act, 3 V.S.A. § 2291c(c)(8) (net zero greenhouse gas emissions).

4           (3) The state board of education shall complete the process to develop  
5           and shall publish to all educational institutions in Vermont the initial curricula  
6           required by Sec. 15 of this act (greenhouse gas curricula).

7           (4) The University of Vermont and Vermont State Colleges shall  
8           complete development of the interdisciplinary curriculum required by Secs. 16  
9           (corporation established) and 17 (climate change curriculum) of this act.

10           (5) The public service board shall adopt a rule or order establishing  
11           environmental impact standards for new renewable energy – tier two in  
12           compliance with Sec. 2 of this act, 30 V.S.A. § 8004(d) (renewable portfolio  
13           standards).

14           (d) Educational institutions in Vermont required to implement greenhouse  
15           gas curricula under Sec. 15 of this act shall commence such implementation  
16           with the school year beginning in fall 2014.

17           (e) The quarter ending March 31, 2013 shall be the first quarter for which  
18           the tax imposed by Sec. 23 of this act (fossil heating fuel efficiency tax) shall  
19           be due.