1	TO THE HOUSE OF REPRESENTATIVES:
2	The Committee on Environment and Energy to which was referred House
3	Bill No. 289 entitled "An act relating to the Renewable Energy Standard"
4	respectfully reports that it has considered the same and recommends that the
5	bill be amended by striking out all after the enacting clause and inserting in
6	lieu thereof the following:
7	Sec. 1. 30 V.S.A. § 218d is amended to read:
8	§ 218d. ALTERNATIVE REGULATION OF ELECTRIC AND NATURAL
9	GAS COMPANIES
10	* * *
11	(n)(1) Notwithstanding subsection (a) of this section and sections 218, 225,
12	226, 227, and 229 of this title, a municipal company formed under local charter
13	or under chapter 79 of this title and an electric cooperative formed under
14	chapter 81 of this title shall be authorized to change its rates for service to its
15	customers if the rate change is:
16	(A) applied to all customers equally;
17	(B) not more than two three percent during any twelve-month period;
18	(C) cumulatively not more than 10 percent from the rates last
19	approved by the Commission; and
20	(D) not going to take effect more than 10 years from the last approval
21	for a rate change from the Commission.

1	* * *
2	Sec. 2. 30 V.S.A. § 8002 is amended to read:
3	§ 8002. DEFINITIONS
4	As used in this chapter:
5	* * *
6	(8) "Existing renewable energy" means renewable energy produced by a
7	plant that came into service prior to or on June 30, 2015 December 31, 2009.
8	* * *
9	(10) "Group net metering system" means a net metering system serving
10	more than one customer, or a single customer with multiple electric meters,
11	located within the service area of the same retail electricity provider. Various
12	buildings owned by municipalities, including water and wastewater districts,
13	fire districts, villages, school districts, and towns, may constitute a group net
14	metering system. A union or district school facility may be considered in the
15	same group net metering system with buildings of its member schools that are
16	located within the service area of the same retail electricity provider. A system
17	that files a complete application for a certificate of public good on or after
18	January 1, 2026 shall not qualify for group net metering, unless the plant will
19	be located on the same parcel, or a parcel adjacent to, the parcel where the
20	energy is utilized.
21	* * *

21

1	(15) "Net metering" means measuring the difference between the
2	electricity supplied to a customer and the electricity fed back by the customer's
3	net metering system during the customer's billing period:
4	(A) using Using a single, non-demand meter or such other meter that
5	would otherwise be applicable to the customer's usage but for the use of net
6	metering; or.
7	(B) if \underline{If} the system serves more than one customer, using multiple
8	meters. The calculation shall be made by converting all meters to a non-
9	demand, non-time-of-day meter, and equalizing them to the tariffed kWh rate.
10	(16) "Net metering system" means a plant for generation of electricity
11	that:
12	(A) is of no <u>not</u> more than 500 kW capacity;
13	(B) operates in parallel with facilities of the electric distribution
14	system;
15	(C) is intended primarily to offset the customer's own electricity
16	requirements and does not primarily supply electricity to electric vehicle
17	supply equipment, as defined in section 201 of this title, for the resale of
18	electricity to the public by the kWh or for other retail sales to the public,
19	including those based in whole or in part on a flat fee per charging session or a
20	time-based fee for occupying a parking space while using electric vehicle
21	supply equipment; and

1	(D)(i) employs a renewable energy source; or
2	(ii) is a qualified micro-combined heat and power system of 20
3	kW or fewer that meets the definition of combined heat and power in
4	subsection 8015(b) of this title and uses any fuel source that meets air quality
5	standards; and
6	(E)(i) for a system that files a complete application for a certificate of
7	public good after December 31, 2024, except for systems as provided for in
8	subdivision (ii) of this subdivision (E), generates energy through a single meter
9	that will be used on the same parcel as, or a parcel adjacent to, the parcel
10	where the plant is located;
11	(ii) for a system that files a complete application for a certificate
12	of public good after December 31, 2025, if the system serves a multifamily
12 13	of public good after December 31, 2025, if the system serves a multifamily building containing qualified rental units serving low-income tenants, as
13	building containing qualified rental units serving low-income tenants, as
13 14	building containing qualified rental units serving low-income tenants, as defined under 32 V.S.A. § 5404a(a)(6), generates energy through a single
13 14 15	building containing qualified rental units serving low-income tenants, as defined under 32 V.S.A. § 5404a(a)(6), generates energy through a single meter that will be used on the same parcel as, or a parcel adjacent to, the parcel
13 14 15 16	building containing qualified rental units serving low-income tenants, as defined under 32 V.S.A. § 5404a(a)(6), generates energy through a single meter that will be used on the same parcel as, or a parcel adjacent to, the parcel where the plant is located; and
13 14 15 16 17	building containing qualified rental units serving low-income tenants, as defined under 32 V.S.A. § 5404a(a)(6), generates energy through a single meter that will be used on the same parcel as, or a parcel adjacent to, the parcel where the plant is located; and (iii) for purposes of this subdivision (16), two parcels shall be

1	(17) "New renewable energy" means renewable energy capable of
2	delivery in New England and produced by a specific and identifiable plant
3	coming into service on or after June 30, 2015 January 1, 2010, but excluding
4	energy generated by a hydroelectric generation plant with a capacity of 200
5	MW or greater.
6	(A) Energy from within a system of generating plants that includes
7	renewable energy shall not constitute new renewable energy, regardless of
8	whether the system includes specific plants that came or come into service on
9	or after June 30, 2015 January 1, 2010.
10	(B) Except as provided in subdivision 8005(c)(3) of this title, "New
11	new renewable energy" also may shall include the additional energy from an
12	existing renewable energy plant retrofitted with advanced technologies or
13	otherwise operated, modified, or expanded to increase the kWh output of the
14	plant in excess of $\frac{1}{2}$ a historical baseline established by calculating the average
15	output of that plant for the 10-year period that ended June 30, 2015 January 1,
16	2010. If the production of new renewable energy through changes in
17	operations, modification, or expansion involves combustion of the resource,
18	the system also must result in an incrementally higher level of energy
19	conversion efficiency or significantly reduced emissions.
20	* * *

1	(25) "Customer with low-income" means a person purchasing energy
2	from a retail electricity provider and with an income that is less than or equal
3	to 80 percent of area median income, adjusted for family size as published
4	annually by the U.S. Department of Housing and Urban Development.
5	* * *
6	(31) "Load" means the total amount of electricity utilized by a retail
7	electricity provider over a 12-month calendar year period, including its retail
8	electric sales, any use by the provider itself not included in retail sales, and
9	transmission and distribution line losses associated with and allocated to the
10	retail electricity provider
11	(32) "Load growth" means the increase above a baseline year in a retail
12	electricity provider's load.
13	Sec. 3. 30 V.S.A. § 8004 is amended to read:
14	§ 8004. SALES OF ELECTRIC ENERGY; RENEWABLE ENERGY
15	STANDARD (RES)
16	* * *
17	(d) Alternative compliance payment. In lieu of purchasing renewable
18	energy or tradeable renewable energy credits or supporting energy
19	transformation projects to satisfy the requirements of this section and section
20	8005 of this title, a retail electricity provider in this State may pay to the
21	Vermont Clean Energy Development Fund established under section 8015 of

1	this title an alternative compliance payment at the applicable rate set forth in
2	section 8005. The administrator of the Vermont Clean Energy Development
3	Fund shall use the payment from a retail electricity provider electing to make
4	an alternative compliance payment to satisfy its obligations under 8005(a)(1),
5	8005(a)(2), 8005(a)(4), and 8005(a)(5) of this title for the development of
6	renewable energy plants within the provider's service territory, if feasible, that
7	are intended to serve and benefit customers with low-income of the retail
8	electricity provider that has made the payment.
9	* * *
10	Sec. 4. 30 V.S.A. § 8005 is amended to read:
11	§ 8005. RES CATEGORIES
12	(a) Categories. This section specifies three five categories of required
13	resources to meet the requirements of the RES established in section 8004 of
14	this title: total renewable energy, distributed renewable generation, and energy
15	transformation, new renewable energy, and load growth renewable energy. In
16	order to support progress toward Vermont's climate goals and requirements, a
17	provider may, but shall not be required to, exceed the statutorily required
18	amounts under this section.
19	(1) Total renewable energy.
20	* * *

1	(B) Required amounts. The amounts of total renewable energy
2	required by this subsection shall be $\frac{55}{63}$ percent of each retail electricity
3	provider's annual retail electric sales load during the year beginning on
4	January 1, 2017 2025, increasing by at least an additional four percent each
5	third January 1 thereafter, until reaching 75 100 percent:
6	(i) on and after January 1, $\frac{2032}{2035}$ for a retail electricity
7	provider who serves a single customer that takes service at 115 kilovolts and
8	each municipal retail electricity provider formed under local charter or chapter
9	79 of this title; and
10	(ii) on and after January 1, 2030, for all other retail electricity
11	providers.
12	(C) Relationship to other categories. Distributed renewable
13	generation used to meet the requirements of subdivision (2) of this subsection
14	(a), new renewable energy under subdivision (4) of this subsection (a), and
15	load growth renewable generation under subdivision (5) of this subsection (a)
16	shall also count toward the requirements of this subdivision. However, an
17	energy transformation project under subdivision (3) of this subsection shall not
18	count toward the requirements of this subdivision.
19	(D) Municipal providers; petition. On petition by a provider that is a
20	municipal electric utility serving not more than 6,000 7,000 customers, the
21	Commission may reduce the provider's required amount under this subdivision

1	(1) for a period of up to three years. The Commission may approve one such
2	period only for a municipal provider. The Commission may reduce this
3	required amount if it finds that:
4	* * *
5	(2) Distributed renewable generation.
6	* * *
7	(B) Definition. As used in this section, "distributed renewable
8	generation" means one of the following:
9	(i) a renewable energy plant that is new renewable energy; has a
10	plant capacity of five MW or less; and
11	(ii) is one of the following:
12	(I) new renewable energy;
13	(II) a hydroelectric renewable energy plant that is, on or before
14	January 1, 2024, owned and operated by a municipal electric utility formed
15	under local charter or chapter 79 of this title, as of January 1, 2020, including
16	future plant modifications that do not cause the capacity of such a plant to
17	exceed five MW; or
18	(III) a hydroelectric renewable energy plant that is, on or before
19	January 1, 2024, owned and operated by a retail electricity provider that is not
20	a municipal electric utility, provided such plant is and continues to be certified
21	by the Low Impact Hydropower Institute. Plants owned by such utilities on or

1	before January 1, 2024, which are later certified by the Low Impact
2	Hydropower Institute, and continue to be certified shall be eligible under this
3	subdivision (2) from the date of certification. Any future modifications that do
4	not cause the capacity of such a plant to exceed five MW shall also be eligible
5	under this subdivision (2); and
6	(iii) is one of the following:
7	(I) is directly connected to the subtransmission or distribution
8	system of a Vermont retail electricity provider; or
9	(II) is directly connected to the transmission system of an
10	electric company required to submit a Transmission System Plan under
11	subsection 218c(d) of this title, if the plant is part of a plan approved by the
12	Commission to avoid or defer a transmission system improvement needed to
13	address a transmission system reliability deficiency identified and analyzed in
14	that Plan; or
15	(ii)(III) is a net metering system approved under the former
16	section 219a or under section 8010 of this title if the system is new renewable
17	energy and the interconnecting retail electricity provider owns and retires the
18	system's environmental attributes.
19	(C) Required amounts. The required amounts of distributed
20	renewable generation shall be one $\frac{5.8}{5.8}$ percent of each retail electricity
21	provider's annual retail electric sales load during the year beginning January 1,

1	2017, increasing by an additional three-fifths of a percent January 1, 2025,
2	increasing by at least an additional:
3	(i) one and a half percent each subsequent January 1 until reaching
4	10 20 percent on and after January 1, 2035 for a retail electricity provider who
5	serves a single customer that takes service at 115 kilovolts and each municipal
6	electric utility formed under local charter or chapter 79 of this title; and
7	(ii) two percent each subsequent January 1 until reaching 20
8	percent on and after January 1, 2032 for all other retail electricity providers.
9	(D) Distributed generation greater than five MW. On petition of a
10	retail electricity provider, the Commission may for a given year allow the
11	provider to employ energy with environmental attributes attached or tradeable
12	renewable energy credits from a renewable energy plant with a plant capacity
13	greater than five MW to satisfy the distributed renewable generation
14	requirement if the plant would qualify as distributed renewable generation but
15	for its plant capacity and when the provider demonstrates either that:
16	(i) it is unable during that a given year to meet the requirement
17	solely with qualifying renewable energy plants of five MW or less. To
18	demonstrate this inability, the provider shall issue one or more requests for
19	proposals, and show that it is unable to obtain sufficient ownership of
20	environmental attributes to meet its required amount under this subdivision (2)
21	for that year from:

1	(i) (I) the construction and interconnection to its system of
2	distributed renewable generation that is consistent with its approved least-cost
3	integrated resource plan under section 218c of this title at a cost less than or
4	equal to the sum of the applicable alternative compliance payment rate and the
5	applicable rates published by the Department under the Commission's rules
6	implementing subdivision 209(a)(8) of this title; and
7	(ii)(II) purchase of tradeable renewable energy credits for
8	distributed renewable generation at a cost that is less than the applicable
9	alternative compliance rate; or
10	(ii) it has only one retail electricity customer who takes service at
11	115 kilovolts on property owned or controlled by the customer as of January 1,
12	2024. Such a provider may seek leave under this subdivision (D) for a period
13	greater than a given year.
14	(3) Energy transformation.
15	* * *
16	(B) Required amounts. For the energy transformation category, the
17	required amounts shall be $\frac{7.33}{7.33}$ percent of each retail electricity provider's
18	annual retail electric sales load during the year beginning January 1, 2017
19	2025, increasing by at least an additional two-thirds of a percent each
20	subsequent January 1 until reaching 12 percent on and after January 1, 2032.
21	However, in the case of a provider that is a municipal electric utility serving

1	not more than 6,000 <u>7,000</u> customers, the required amount shall be two six
2	percent of the provider's annual retail sales load beginning on January 1, 2019
3	2025, increasing by an additional two-thirds of a percent each subsequent
4	January 1 until reaching 10 and two-thirds percent on and after January 1,
5	2032. Prior to January 1, 2019, such a municipal electric utility voluntarily
6	may engage in one or more energy transformation projects in accordance with
7	this subdivision (3). In order to support progress toward Vermont's climate
8	goals and requirements, a retail electricity provider may, but shall not be
9	required to, exceed the statutorily required amounts, up to and including
10	procuring all available energy transformation category projects and measures.
11	The Commission shall not hold imprudent any retail electricity provider
12	expenditure to support energy transformation projects or measures, based on
13	the expenditure being above and beyond what is statutorily required, provided
14	the projects and measures otherwise comply with statute and Commission
15	<u>rules.</u>
16	* * *
17	(4) <u>New renewable energy.</u>
18	(A) Purpose; establishment. This subdivision (4) establishes a new
19	regional renewable energy category for the RES. This category encourages the
20	use of new renewable generation to support the reliability of the regional ISO-
21	NE electric system. To satisfy this requirement, a provider shall use new

1	renewable energy with environmental attributes attached or any class of
2	tradeable renewable energy credits generated by any renewable energy plant
3	coming into service after January 1, 2010 whose energy is capable of delivery
4	in New England.
5	(B) Required amounts and exemption. A retail electricity provider
6	that is 100 percent renewable under subdivision (b)(1) of this section shall be
7	exempt from any requirement for new renewable energy under this
8	subdivision (4). For all other retail electricity providers, the amount of new
9	renewable energy required by this subsection (a) shall be:
10	(i) For a retail electricity provider with 75,000 or more customers,
11	the following percentages of each provider's annual load:
12	(I) Four percent beginning on January 1, 2027.
13	(II) 10 percent on and after January 1, 2030.
14	(III) 15 percent on and after January 1, 2032.
15	(IV) 20 percent on and after January 1, 2035. If the
16	Commission determines in the report required under subdivision 8005b(b)(4)
17	of this title that it is reasonable to expect that there will be sufficient new
18	regional renewable resources available for a provider to meet its requirement
19	under this subdivision (4) at or below the alternative compliance payment rate
20	established in subdivision (6)(C) of this subsection (a) during a year beginning
21	prior to January 1, 2035, the Commission shall require that provider to meet its

1	requirement under this subdivision (4) in the earliest year the Commission
2	determines it can, provided that the provider shall not be required to meet that
3	requirement prior to the year starting January 1, 2032.
4	(ii) For a retail electricity provider with less than 75,000
5	customers, the following percentages of each provider's annual load:
6	(I) five percent beginning on January 1, 2030; and
7	(II) 10 percent on and after January 1, 2035.
8	(C) Relationship to other categories. Distributed renewable
9	generation used to meet the requirements of subdivision (2) of this subsection
10	(a) shall not also count toward the requirements of this subdivision (4). An
11	energy transformation project under subdivision (3) of this subsection (a) shall
12	not count toward the requirements of this subdivision (4).
13	(D) Single-customer provider. If a retail electricity provider with one
14	customer taking service at 115 kilovolts has not satisfied the distributed
15	renewable generation requirements of subdivision (2) of this subsection (a) on
16	property owned or controlled by the customer as of January 1, 2024, and the
17	cost of additional distributed renewable generation would be at or above the
18	alternative compliance payment rate for the distributed renewable generation
19	category or meeting that requirement with new renewable energy on its
20	property would be economically infeasible, that provider may satisfy the

1	requirements of subdivision (2) of this subsection (a) with an equivalent
2	amount of increased new renewable energy as defined in this subdivision (4).
3	(5) Load growth; retail electricity providers; 100 percent renewable.
4	(A) For any retail electricity provider that is 100 percent renewable
5	under subdivision (b)(1) of this section, that provider shall meet its load growth
6	above its 2024 calendar year load, with at least the following percentages of
7	new renewable energy or any renewable energy eligible under subdivision (2)
8	of this subsection (a):
9	(i) 50 percent beginning on January 1, 2025;
10	(ii) 75 percent on and after January 1, 2026;
11	(iii) 90 percent on and after January 1, 2027;
12	(iv) 100 percent on and after January 1, 2028 until the provider's
13	annual load exceeds 135 percent of the provider's 2022 annual load, at which
14	point the provider shall meet its additional load growth with at least 50 percent
15	new renewable energy until 2035; and
16	(v) 75 percent on and after January 1, 2035.
17	(B) For a retail electricity provider with 75,000 or more customers,
18	and for each provider, excluding any provider that is 100 percent renewable
19	under subdivision (b)(1) of this section, that is a member of the Vermont
20	Public Power Supply Authority or its successor, that provider shall meet its
21	load growth above its 2035 calendar year load with 100 percent new renewable

1	energy, which shall include the required amounts of distributed renewable
2	generation as applicable to the provider under subdivision (2) of this
3	subsection (a).
4	(C) On petition of a retail electricity provider subject to the load
5	growth requirements in subdivision (A) of this subdivision (a)(5), the
6	Commission may for a given year allow the provider to employ existing
7	renewable energy with environmental attributes attached or tradeable
8	renewable energy credits from an existing renewable energy plant to satisfy
9	part or all of the load growth requirement if the provider demonstrates that,
10	after making every reasonable effort, it is unable during that year to meet the
11	requirement with energy with environmental attributes attached or tradeable
12	renewable energy credits from qualifying new renewable energy plants.
13	(i) To demonstrate this inability, the provider shall at a minimum
14	timely issue one or more subsequent requests for proposals or transactions and
15	any additional solicitations as necessary to show that it is unable to obtain
16	sufficient ownership of environmental attributes from new renewable energy to
17	meet its required amount under this subdivision at a cost that is less than or
18	equal to the applicable alternative compliance rate for the load growth
19	category.
20	(ii) In the event the provider is able to meet a portion, but not all,
21	of its load growth requirement in a calendar year with attributes from new

1	renewable energy at a cost that is less than or equal to the applicable
2	alternative compliance rate for the load growth category, the Commission shall
3	allow the provider to use existing renewables only for that portion of its
4	requirement that it is unable to meet with new renewable energy.
5	(iii) In the event that the provider is unable to meet its load growth
6	requirement with a combination of attributes from new renewable energy and
7	existing renewable energy at a cost that is less than or equal to the alternative
8	compliance rate laid out in subdivision (6) in this subsection (a), the
9	Commission shall require the provider to meet the remainder of its requirement
10	under this subdivision (5) by paying the alternative compliance rate for the
11	load growth category.
12	(D) Notwithstanding any provision of law to the contrary, any
13	additional energy available to a retail electricity provider that is 100 percent
14	renewable under subdivision (b)(1) of this section under agreements approved
15	or authorized by the Public Utility Commission in its April 15, 2011 Order
16	issued in Docket No. 7670, Petition of twenty Vermont utilities and Vermont
17	Public Power Supply Authority requesting authorization for the purchase of
18	218 MW to 225 MW of electricity shall also be eligible to meet the
19	requirements laid out in subdivision (A) of this subdivision (a)(5), provided
20	that such additional energy does not exceed two MW, and further provided that

1	a retail electricity provider exercises its right to such energy on or before
2	January 1, 2028 and for no longer than through December 31, 2038.
3	(6) Alternative compliance rates.
4	(A) The alternative compliance payment rates for the categories
5	established by subdivisions (1)–(3) of this subsection (a) shall be:
6	(i) total renewable energy requirement — 0.01 per kWh; and
7	(ii) distributed renewable generation and energy transformation
8	requirements — \$0.06 per kWh.
9	(B) The Commission shall adjust these rates for inflation annually
10	commencing January 1, 2018, using the CPI.
11	(C) For the new renewable energy and load growth requirements, it
12	shall be \$0.04 per kWh annually commencing on January 1, 2025, with
13	calculations for inflation beginning on January 1, 2023.
14	(D) The Commission shall have the authority to adjust the alternative
15	compliance payment rate for the new renewable energy and load growth
16	requirements differently than the rate of inflation in order to minimize
17	discrepancies between this rate and alternative compliance payments for
18	similar classes in other New England states and to increase the likelihood that
19	Vermont retail electricity providers cost-effectively achieve these
20	requirements, if it determines doing so is consistent with State energy policy
21	under section 202a of this title.

1	(b) Reduced amounts; providers; 100 percent renewable.
2	(1) The provisions of this subsection shall apply to a retail electricity
3	provider that:
4	(A) as of January 1, 2015, was entitled, through contract, ownership
5	of energy produced by its own generation plants, or both, to an amount of
6	renewable energy equal to or more than 100 percent of its anticipated total
7	retail electric sales in 2017, regardless of whether the provider owned the
8	environmental attributes of that renewable energy; and
9	(B) annually each July 1 commencing in 2018, owns and has retired
10	tradeable renewable energy credits monitored and traded on the New England
11	Generation Information System or otherwise approved by the Commission
12	equivalent to 100 percent of the provider's total retail sales of electricity for the
13	previous calendar year.
14	* * *
15	(c) Biomass.
16	(1) Distributed renewable generation that employs biomass to produce
17	electricity shall be eligible to count toward a provider's distributed renewable
18	generation or energy transformation requirement only if the plant satisfies the
19	requirements of subdivision (3) of this subsection and produces both electricity
20	and thermal energy from the same biomass fuel and the majority of the energy
21	recovered from the plant is thermal energy.

1	(2) Distributed renewable generation and energy transformation projects
2	that employ forest biomass to produce energy shall comply with renewability
3	standards adopted by the Commissioner of Forests, Parks and Recreation under
4	10 V.S.A. § 2751. Energy transformation projects that use wood feedstock,
5	except for noncommercial applications, that are eligible at the time of project
6	commissioning to meet the renewability standards adopted by the
7	Commissioner of Forests, Parks and Recreation do not lose eligibility due to a
8	subsequent change in the renewability standards after the project
9	commissioning date.
10	(3) No new wood biomass electricity generation facility or wood
11	biomass combined heat and power facility coming into service after January 1,
12	2023 shall be eligible to satisfy any requirements of this section and section
13	8004 of this title unless that facility achieves 60 percent overall efficiency and
14	at least a 50 percent net lifecycle greenhouse gas emissions reduction relative
15	to the lifecycle emissions from the combined operation of a new combined-
16	cycle natural gas plant using the most efficient commercially available
17	technology. Any energy generation using wood feedstock from an existing
18	wood biomass electric generation facility placed in service prior to January 1,
19	2023 remains eligible to satisfy any requirements of this section and section
20	8004 of this title. Changes to wood biomass electric facilities that were placed
21	in service prior to January 1, 2023, including converting to a combined heat

1	and power facility, adding or modifying a district energy system, replacing
2	electric generation equipment, or repowering the facility with updated or
3	different electric generation technologies, do not change the in service date for
4	the facility, or affect its eligibility to satisfy the requirements of this section
5	and section 8004 of this title, or qualify it as new renewable energy.
6	(d) Hydropower. A hydroelectric renewable energy plant, that is not
7	owned by a retail electricity provider, shall be eligible to satisfy the distributed
8	renewable generation or energy transformation requirement only if, in addition
9	to meeting the definition of distributed renewable generation, the plant:
10	(1) is and continues to be certified by the Low-impact Hydropower
11	Institute; or
12	(2) after January 1, 1987, received a water quality certification pursuant
13	to 33 U.S.C. § 1341 from the Agency of Natural Resources.
14	Sec. 5. 30 V.S.A. § 8005b is amended to read:
15	§ 8005b. RENEWABLE ENERGY PROGRAMS; REPORTS
16	(a) The Department shall file reports with the General Assembly in
17	accordance with this section.
18	(1) The House Committees on Commerce and Economic Development
19	and on Energy and Technology Environment and Energy and the Senate
20	Committees on Economic Development, Housing and General Affairs, on

1	Finance, and on Natural Resources and Energy each shall receive a copy of
2	these reports.
3	* * *
4	(b) The annual report under this section shall include at least each of the
5	following:
6	(1) An assessment of the costs and benefits of the RES based on the
7	most current available data, including rate and economic impacts, customer
8	savings, technology deployment, greenhouse gas emission reductions actually
9	achieved, fuel price stability, effect on transmission and distribution upgrade
10	costs, and any recommended changes based on this assessment.
11	(2) Projections, looking at least 10 years ahead, of the impacts of the
12	RES.
13	(A) The Department shall employ an economic model to make these
14	projections, to be known as the Consolidated RES Model, and shall consider at
15	least three scenarios based on high, mid-range, and low energy price forecasts.
16	(B) The Department shall make the model and associated documents
17	available on the Department's website.
18	(C) In preparing these projections, the Department shall:
19	(i) characterize each of the model's assumptions according to level
20	of certainty, with the levels being high, medium, and low; and
21	(ii) provide an opportunity for public comment.

1	(D) The Department shall project, for the State, the impact of the
2	RES in each of the following areas: electric utility rates; total energy
3	consumption; electric energy consumption; fossil fuel consumption; and
4	greenhouse gas emissions. The report shall compare the amount or level in
5	each of these areas with and without the program.
6	(3) An assessment of whether the requirements of the RES have been
7	met to date, and any recommended changes needed to achieve those
8	requirements.
9	(4) In addition to the information in subdivisions (1) through (3) of this
10	subsection prepared by the Department, for the annual report due in 2029, the
11	Commission as shall issue a report on whether it is reasonable to expect that
12	there will be sufficient new regional renewable resources available for a retail
13	electricity provider with 75,000 or more customers to meet its requirement
14	under subdivision $8005(a)(4)(B)(i)(IV)$ of this title at or below the alternative
15	compliance payment rate for the new renewable generation category of section
16	8005 of this title during the year beginning on January 1, 2032, or during the
17	years beginning on January 1, 2033 or January 1, 2034. The Commission shall
18	not be required to issue this report in a contested case under 3 V.S.A. chapter
19	25, but shall conduct a proceeding on the issue with opportunities for
20	participation by the retail electricity providers, Vermont Public Power Supply
21	Authority, Renewable Energy Vermont, and other members of the public.

1	Notwithstanding the timeline specified in subdivision 202b(e)(1) of this title,
2	the Commission shall file this annual report on or before December 15, 2028.
3	* * *
4	Sec. 6. 30 V.S.A. § 8006a is amended to read:
5	§ 8006a. GREENHOUSE GAS REDUCTION CREDITS
6	(a) Standard offer adjustment. In accordance with this section, greenhouse
7	gas reduction credits generated by an eligible ratepayer shall result in an
8	adjustment of the standard offer under subdivision 8005a(c)(1) of this title
9	(cumulative capacity; pace) or may be utilized by a retail electricity provider
10	that serves a single customer that takes service at 115 kilovolts to meet the
11	energy transformation requirements under subdivision 8005(a)(3)(D) of this
12	title. For the purpose of adjusting the standard offer under subdivision
13	8005a(c)(1) of this title or energy transformation requirements under
14	subdivision 8005(a)(3)(D) of this title, the amount of a year's greenhouse gas
15	reduction credits shall be the lesser of the following:
16	(1) The amount of greenhouse gas reduction credits created by the an
17	eligible ratepayers <u>ratepayer</u> served by all providers an eligible provider.
18	(2) The providers' eligible provider's annual retail electric sales load
19	during that year to those eligible ratepayers creating greenhouse gas reduction
20	credits.
21	(b) Definitions. In As used in this section:

1	(1) "Eligible ratepayer" means a customer of a Vermont retail electricity
2	provider who takes service at 115 kilovolts and has demonstrated to the
3	Commission that it has a comprehensive energy and environmental
4	management program. Provision of the customer's certification issued under
5	standard 14001 (environmental management systems) of the International
6	Organization for Standardization (ISO) shall constitute such a demonstration.
7	(2) <u>"Eligible provider" means a Vermont retail electricity provider who</u>
8	serves a single customer that takes service at 115 kilovolts.
9	(3) "Eligible reduction" means a reduction in non-energy-related
10	greenhouse gas emissions from manufacturing processes at an in-state facility
11	of an eligible ratepayer, provided that each of the following applies:
12	(A) The reduction results from a specific project undertaken by the
13	eligible ratepayer at the in-state facility after January 1, 2012 2023.
14	(B) The specific project reduces or avoids greenhouse gas emissions
15	above and beyond any reductions of such emissions required by federal and
16	State statutes and rules.
17	(C) The reductions are quantifiable and verified by an independent
18	third party as approved by the Agency of Natural Resources and the
19	Commission. Such independent third parties shall be certified by a body
20	accredited by the American National Standards Institute (ANSI) as having a
21	certification program that meets the ISO standards applicable to verification

1	and validation of greenhouse gas assertions. The independent third party shall
2	use methodologies specified under 40 C.F.R. part 98 and U.S. Environmental
3	Protection Agency greenhouse gas emissions factors and global warming
4	potential figures to quantify and verify reductions in all cases where those
5	factors and figures are available.
6	(3)(4) "Greenhouse gas" shall be as defined under has the same meaning
7	<u>as in</u> 10 V.S.A. § 552.
8	(4)(5) "Greenhouse gas reduction credit" means a credit for eligible
9	reductions, calculated in accordance with subsection (c) of this section and
10	expressed as a kWh credit eligible under subdivision 8005a(c)(1) of this title,
11	or as a credit eligible under subdivision 8005(a)(3)(D) of this title.
12	(c) Calculation. Greenhouse gas reduction credits shall be calculated as
13	follows:
14	(1) Eligible reductions shall be quantified in metric tons of CO2
15	equivalent, in accordance with the methodologies specified under 40 C.F.R.
16	part 98, and using U.S. Environmental Protection Agency greenhouse gas
17	emissions factors and global warming potential figures, and may shall be
18	counted annually for the life of the specific project that resulted in the
19	reduction. A project that converts a gas with a high global warming potential
20	into a gas with relatively lower global warming potential shall be eligible if the
21	conversion produces a CO2 equivalent reduction on an annual basis.

1	(2) Metric tons of CO2 equivalent quantified under subdivision (1) of
2	this subsection shall be converted into units of energy through calculation of
3	the equivalent number of kWh of generation by renewable energy plants, other
4	than biomass, that would be required to achieve the same level of greenhouse
5	gas emission reduction through the displacement of market power purchases.
6	For the purpose of this subdivision, the value of the avoided greenhouse gas
7	emissions shall be based on the aggregate greenhouse gas emission
8	characteristics of system power in the regional transmission area overseen by
9	the Independent System Operator of New England (ISO-NE).
10	(d) Reporting. An eligible ratepayer provider shall report to the
11	Commission annually on each specific project undertaken by an eligible
12	ratepayer to create eligible reductions. The Commission shall specify the
13	required contents of such reports, which shall be publicly available.
14	(e) Savings. A provider shall pass on savings that it realizes through
15	greenhouse gas reduction credits proportionally to the eligible ratepayers
16	generating the credits.
17	Sec. 7. 30 V.S.A. § 8010 is amended to read:
18	§ 8010. SELF-GENERATION AND NET METERING
19	* * *

1	(c) In accordance with this section, the Commission shall adopt and
2	implement rules that govern the installation and operation of net metering
3	systems.
4	(1) The rules shall establish and maintain a net metering program that:
5	* * *
6	(E) ensures that all customers who want to participate in net metering
7	have the opportunity to do so; [Repealed.]
8	* * *
9	(H) allows a customer to retain ownership of the environmental
10	attributes of energy generated by the customer's net metering system and of
11	any associated tradeable renewable energy credits or to transfer those attributes
12	and credits to the interconnecting retail provider, and:
13	(i) if the customer retains the attributes, reduces the value of the
14	credit provided under this section for electricity generated by the customer's
15	net metering system by an appropriate amount; and
16	(ii) if the customer transfers the attributes to the interconnecting
17	provider, requires the provider to retain them for application toward
18	compliance with sections 8004 and 8005 of this title unless the provider has
19	fewer than 75,000 customers, in which case the attributes do not need to be
20	applied toward compliance obligations under sections 8004 and 8005 of this
21	title; and

1	(iii) if a retail electricity provider that is 100 percent renewable
2	under subdivision 8005(b)(1) of this title does not retire the transferred
3	attributes under sections 8004 and 8005 of this title, requires that the provider
4	apply an equivalent amount of attributes from distributed renewable generation
5	that qualifies under subdivision 8005(a)(2) of this title toward its compliance
6	obligations under sections 8004 and 8005 of this title.
7	(2) The rules shall include provisions that govern:
8	* * *
9	(F) the amount of the credit to be assigned to each kWh of electricity
10	generated by a net metering customer in excess of the electricity supplied by
11	the interconnecting provider to the customer, the manner in which the
12	customer's credit will be applied on the customer's bill, and the period during
13	which a net metering customer must use the credit, after which the credit shall
14	revert to the interconnecting provider.
15	(i) When assigning an amount of credit under this subdivision (F),
16	the Commission shall consider making multiple lengths of time available over
17	which a customer may take a credit and differentiating the amount according to
18	the length of time chosen. For example, a monthly credit amount may be
19	higher if taken over 10 years and lower if taken over 20 years. Factors relevant
20	to this consideration shall include the customer's ability to finance the net

1	metering system, the cost of that financing, and the net present value to all
2	ratepayers of the net metering program. [Repealed.]
3	(ii) In As used in this subdivision (ii), "existing net metering
4	system" means a net metering system for which a complete application was
5	filed before January 1, 2017.
6	(I) Commencing 10 years from the date on which an existing
7	net metering system was installed, the Commission may apply to the system
8	the same rules governing bill credits and the use of those credits on the
9	customer's bill that it applies to net metering systems for which applications
10	were filed on or after January 1, 2017, other than any adjustments related to
11	siting and tradeable renewable energy credits.
12	(II) <u>A provider with fewer than 75,000 customers, including</u>
13	one that is 100 percent renewable under subdivision 8005(b)(1) of this title,
14	may apply the environmental attributes of energy generated by existing net
15	metering systems that are less than 150 kW to the provider's statutory
16	requirements under section 8005 of this title if the retail provider has not been
17	informed that the environmental attributes have been sold or otherwise retired.
18	A provider with fewer than 75,000 customers, including one that is 100 percent
19	renewable under subdivision 8005(b)(1) of this title, may apply the
20	environmental attributes of energy generated by existing net metering systems
21	that are 150 kW or greater to the provider's statutory requirements under

1	section 8005 of this title if the provider demonstrates to the Commission the
2	environmental attributes have not been sold or otherwise retired.
3	(III) This subdivision (ii) shall apply to existing net metering
4	systems notwithstanding any contrary provision of 1 V.S.A. § 214 and 2014
5	Acts and Resolves No. 99, Sec. 10.
6	* * *
7	(3) The rules shall establish standards and procedures governing
8	application for and issuance or revocation of a certificate of public good for net
9	metering systems under the provisions of section 248 of this title. In
10	establishing these standards and procedures:
11	* * *
12	(C) The rules shall seek to simplify the application and review
13	process as appropriate, including simplifying the application and review
14	process to encourage group net metering systems when the system is at least 50
15	percent owned by the customers who receive the bill credits for the electricity
16	generated by the system. [Repealed.]
17	* * *
18	Sec. 8. REPORT
19	On or before January 15, 2025, the Department of Public Service, after
20	consultation with the Public Utility Commission, the Vermont Housing
21	Finance Agency, the Vermont Housing and Conservation Board, Evernorth,

1	Green Mountain Power, Vermont Electric Cooperative, the Vermont Public
2	Power Supply Authority, and any other electric utilities that wish to participate
3	shall submit a report to the House Committee on Environment and Energy and
4	the Senate Committee on Natural Resources and Energy. This report will:
5	(1) Discuss current programs electric utilities have in place to serve
6	income-eligible customers.
7	(2) Discuss progress affordable housing funders and developers have
8	made to date in connecting projects with solar resources, as well as any
9	barriers to this.
10	(3) List funding sources available for solar and other energy-related
11	projects benefiting affordable housing and households with low-income,
12	including if it is federal or time-limited.
13	(4) Propose comparable successor programs to group net-metering for
14	connecting affordable housing developments and income-eligible residents of
15	manufactured home communities with solar projects in order to reduce
16	operating costs, reduce resident energy burdens, and encourage electrification
17	and decarbonization of buildings. Programs that meet the intent of this section
18	shall include the following:
19	(A) A process to bring additional solar or other renewable energy
20	projects online that could be owned by affordable housing developers.

1	(B) A process to enroll eligible customers, including property owners
2	of qualified rental units. If the program would directly connect with
3	customers, the program would include a bill credit process to allocate a
4	customer's kWh solar share on a monthly basis.
5	Sec. 9. EFFECTIVE DATE
6	This act shall take effect on July 1, 2024.
7	
8	
9	
10	(Committee vote:)
11	
12	Representative
13	FOR THE COMMITTEE