An act relating to the Standard Offer Program

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

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

§ 8009. Baseload renewable power portfolio requirement

- (a) In As used in this section:
- (1) "Baseload renewable power" means a plant that generates electricity from renewable energy; that, during normal operation, is capable of taking all or part of the minimum load on an electric transmission or distribution system; and that produces electricity essentially continuously at a constant rate.
- (2) "Baseload renewable power portfolio requirement" means an annual average of 175,000 MWh of baseload renewable power from an in-state woody biomass plant that was commissioned prior to September 30, 2009, has a nominal capacity of 20.5 MW, and was in service as of January 1, 2011.
- (3) "Biomass" means organic nonfossil material of biological origin constituting a source of renewable energy within the meaning of subdivision $8002\frac{(17)(21)}{(21)}$ of this title.
- (4) [Repealed.]
- (b) Notwithstanding subsection 8004(a) and subdivision 8005(d)(1) of this title, commencing November 1, 2012, the electricity supplied by each Vermont retail electricity provider to its customers shall include the provider's pro rata share of the baseload renewable power portfolio requirement, which shall be based on the total Vermont retail kWh sales of all such providers for the previous calendar year. The obligation created by this subsection shall cease on November 1, 2022 2032.
- (c) A plant used to satisfy the baseload renewable power portfolio requirement shall be a qualifying small power production facility under 16 U.S.C. § 796(17)(C) and 18 C.F.R. part 292.
- (d) The On or before January 1, 2022, the Commission shall determine, for the period beginning November 1, 2022, and ending November 1, 2032, the price to be paid to a plant used to satisfy the baseload renewable power portfolio requirement. The Commission shall not be required to make this determination as a contested case under 3 V.S.A. chapter 25. The price shall be the avoided cost of the Vermont composite electric utility system. In this subsection, the term "avoided cost" means the incremental cost to retail electricity providers of electric energy or capacity, or both, which, but for the purchase from the plant proposed to satisfy the baseload renewable power portfolio requirement, such providers would obtain from a source using the same generation technology as the proposed plant. In this subsection, the term "avoided cost" also includes the Commission's consideration of each of the following:
- (1) The relevant cost data of the Vermont composite electric utility system.
- (2) The terms of the potential contract, including the duration of the obligation.

- (3) The availability, during the system's daily and seasonal peak periods, of capacity or energy from a proposed plant.
- (4) The relationship of the availability of energy or capacity from the proposed plant to the ability of the Vermont composite electric utility system or a portion thereof to avoid costs.
- (5) The costs or savings resulting from variations in line losses from those that would have existed in the absence of purchases from the proposed plant.
- (6) The supply and cost characteristics of the proposed plant, including the costs of operation and maintenance of an existing plant during the term of a proposed contract.
- (7) Mechanisms for encouraging dispatch of the proposed plant relative to the ISO New England wholesale energy price and value of regional renewable energy credits, while also respecting the physical operating parameters and fixed costs of the proposed plant.
- (8) The fuel supply for the proposed plant is obtained from ecologically sound and sustainable sources. In the case of biomass, this shall include an assessment of whether fuel supplies use ecologically sound harvesting practices and whether they promote a diverse and sustainable forest economy in the region.
- (9) The appropriate assignment of risks associated with the ISO New England Forward Capacity Market Pay for Performance program.
- (10) Any potential opportunities associated with having the proposed plant withdraw from the ISO New England Forward Capacity Market, while respecting the economic parameters of the proposed plant.
- (e) In determining the price under subsection (d) of this section, the Commission may require a plant proposed to be used to satisfy the baseload renewable power portfolio requirement to produce such information as the Commission reasonably deems necessary.
- (f) With respect to a plant used to satisfy the baseload renewable power portfolio requirement:
- (1) The Standard Offer Facilitator shall purchase the baseload renewable power, and shall allocate the electricity purchased and any associated costs to the Vermont retail electricity providers based on their pro rata share of total Vermont retail kWh sales for the previous calendar year, and the Vermont retail electricity providers shall accept and pay those costs.
- (2) Any tradeable renewable energy credits attributable to the electricity purchased shall be transferred to the Vermont retail electricity providers in accordance with their pro rata share of the costs for such electricity as determined under subdivision (1) of this subsection.
- (3) All capacity rights attributable to the plant capacity associated with the electricity purchased shall be transferred to the Vermont retail electricity providers in accordance with their pro rata share of the costs for such electricity as determined under subdivision (1) of this subsection.
- (4) All reasonable costs of a Vermont retail electricity provider incurred under this section shall be included in the provider's revenue requirement for purposes of ratemaking under sections 218, 218d, 225, and 227 of this title. In including such costs, the Commission shall appropriately account for any credits received under subdivision (2) of this subsection. Costs included in a retail electricity provider's

revenue requirement under this subdivision shall be allocated to the provider's ratepayers as directed by the Commission.

- (g) A retail electricity provider shall be exempt from the requirements of this section if, and for so long as, one-third of the electricity supplied by the provider to its customers is from a plant that produces electricity from woody biomass.
- (h) The Commission may issue rules or orders to carry out this section.
- (i) The State and its instrumentalities shall not be liable to a plant owner or retail electricity provider with respect to any matter related to the baseload renewable power portfolio requirement or a plant used to satisfy such requirement, including costs associated with a contract related to such a plant or any damages arising from the breach of such a contract, the flow of power between a plant and the electric grid, or the interconnection of a plant to that grid. For the purpose of this section, the Commission and the Standard Offer Facilitator constitute instrumentalities of the State.
- (j) The Commission shall authorize any Agency participating in a proceeding under this section or order issued under this section to assess its costs against a proposed plant consistent with section 21 of this title.

Sec. 2. TRANSITION PROVISION

All decisions and orders of the former Public Service Board and the Public Utility Commission in the matter Investigation into the Establishment of a Standard-Offer Price for Baseload Renewable Power under the Sustainably Priced Energy Enterprise Development ("SPEED") Program, Docket No. 7782, shall remain in full force and effect through October 31, 2022.

Sec. 3. EFFECTIVE DATE

This act shall take effect on passage.

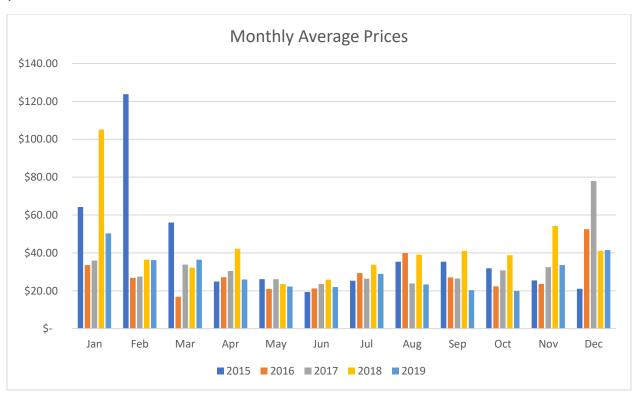
Explanation of the proposed Section 8009(d)(7)

This bill would continue to provide Ryegate with a long-term contract that insulates the plant from low wholesale energy prices

Even with a long-term contract, pursuant to ISO New England wholesale electricity market rules (approved by the Federal Energy Regulatory Commission), the Ryegate facility participates in the ISO-NE wholesale energy and capacity markets. ISO-NE's wholesale energy market prices the value of generation based on time and location; energy prices could be as low as negative \$150 or as high as \$1,000, depending on the amount of load on the system, transmission constraints that limit the flow of energy in New England, and the availability of other generating resources.

For example, on a warm sunny day in late May, there is typically an abundance of low-cost solar and hydro resources and fairly low load levels, which result in low wholesale energy prices. During a very cold early February day, the majority of natural gas-fired generators do not have sufficient fuel to run and the system is reliant on expensive oil-fired units to supply electricity; this latter scenario is more likely to result in high wholesale energy prices.

To the extent that Ryegate receives a set dollar amount per MWh that is independent of wholesale energy prices, the benefit to Vermont electric customers will vary considerably. On the late May day described above, if the contract payment to Ryegate is \$100/MWh, there is a net cost to customers if the electric utilities would have been able to purchase energy for \$15/MWh. Conversely, on the early February day, customers would receive a benefit from having Ryegate operate if the wholesale price is \$150/MWh. The graph below depicts the average monthly wholesale energy prices for the past few years.



As can be seen from the chart above, if the contract price for Ryegate is \$100/MWh, there will be a net cost to electric customers, from a power supply perspective in large portions of the year, although Ryegate does serve as a hedge against price spikes during the winter months. Given the considerable variation in wholesale energy prices, the Department recommends providing the PUC with authority to consider mechanisms for encouraging Ryegate's owners to run the plant less during low-price periods.

The ISO-NE wholesale energy price changes on a five-minute basis; however, older units such as Ryegate cannot ramp up or down quickly and a significant number of start-ups and shut-downs can create significant wear and tear on the plant. Accordingly, it is not reasonable to expect the plant production to completely follow wholesale energy prices. However, there are ways to maximize the value of the output from the plant. These could include ramping down production when energy prices are expected to be low, ensuring that scheduled maintenances occur during historically low-price periods, and delaying a start-up after an unexpected outage if the prices are low. The proposed language in Section 800(d)(7) directs the PUC to develop mechanisms that achieve this result.

The contract authorized by the PUC included a Dispatch Savings Calculation provision that attempted to address a cost sharing mechanism associated with coordinating production of the plant with wholesale energy prices. Consequently, requiring the PUC to consider mechanisms is consistent with past practice.

Explanation of the proposed Section 8009(d)(9).

The proposed project participates in the ISO-NE Forward Capacity Market, which provides set revenues for being available to operate during the peak hour of the year. In recent years, ISO-NE has altered the Forward Capacity market rules such that there are also operational obligations associated with FCM payments. In the event of a scarcity event — a pre-defined system-wide event where there are insufficient generation resources — generators that are operating during the scarcity event are paid a bonus for operating, while a generator not operating during the event receives a penalty. Because the penalty or bonus is associated with operation of the plant, which is under the control of Ryegate's owners, there should be consideration by the PUC of assigning to Ryegate or electric ratepayers the risks and benefits associated with the FCM pay for performance program.

Explanation of the proposed Section 8009(d)(10)

There are some benefits to Vermont ratepayers of having generation resources withdrawing from the ISO New England Forward Capacity Market. It is not clear whether this would be possible or advisable; however, to the extent that electric ratepayers would receive benefit from such action without negatively impacting the economics of the Ryegate plant, the PUC should review the costs and benefits of this approach.