

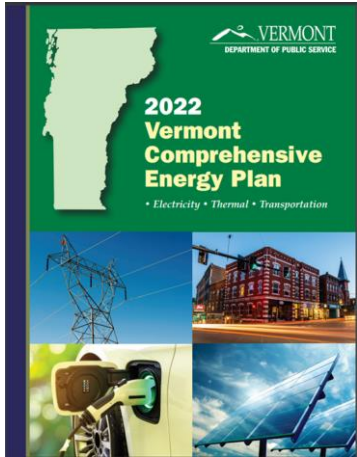
Comments on Renewable Energy Standard Bill 23-0107

TJ POOR, DEPARTMENT OF PUBLIC SERVICE

BEFORE SENATE NATURAL RESOURCES COMMITTEE

APRIL 18, 2023

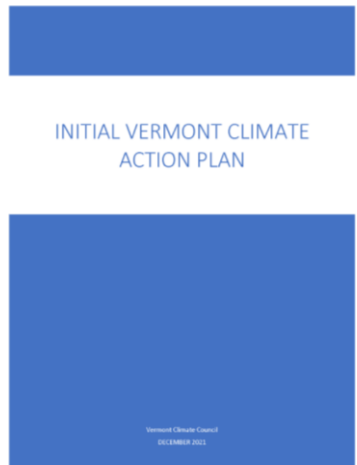
Comprehensive Energy Plan and Climate Action Plan



2022 Comprehensive Energy Plan

Consider adjustments to the Renewable Energy Standard and complementary renewable energy programs comprehensively, through a transparent and open process...The considerations should include:

- *Consideration of a low-carbon or carbon-free standard, in addition to a 100% renewable energy standard;*
- *Consideration of a cohesive set of programs to support the standard (pg. 270)*



2021 Climate Action Plan

Vermont should develop [a] 100% carbon free or renewable electric portfolio standard to ensure progress continues into the 2030s and beyond while being mindful of the economic impact on cost-burdened Vermonters and maintaining the cost-effectiveness of fuel-switching to electric measures (pg. 103)

(emphasis added)

ELECTRIC SECTOR PUBLIC ENGAGEMENT

Public Service Department to **review our current state electricity policies and programs**, as recommended by the state Comprehensive Energy Plan and Climate Action Plan.

After opportunities to comment on the scope and design of a review process, the Public Service Department released a Public Engagement Plan* consisting of three phases.



*<https://publicservice.vermont.gov/renewables>

Current RES Model (Projections for 2022-2031)

30 V.S.A. 8005b(b)(2) requires the Public Service Department (PSD) to conduct an analysis of expected performance of the RES over a ten-year period utilizing a “Consolidated RES Model” to estimate the credible range of outcomes

Estimates of RES electric sector costs under various scenarios, Rate pressure, Carbon emission reductions

Key inputs include, Load forecast, REC prices (*Tiers I & II*), Energy & Fossil Fuel Prices, Tier III technologies and impact on peak loads Net-metering adoption rates

Stakeholders were provided an opportunity to provide input

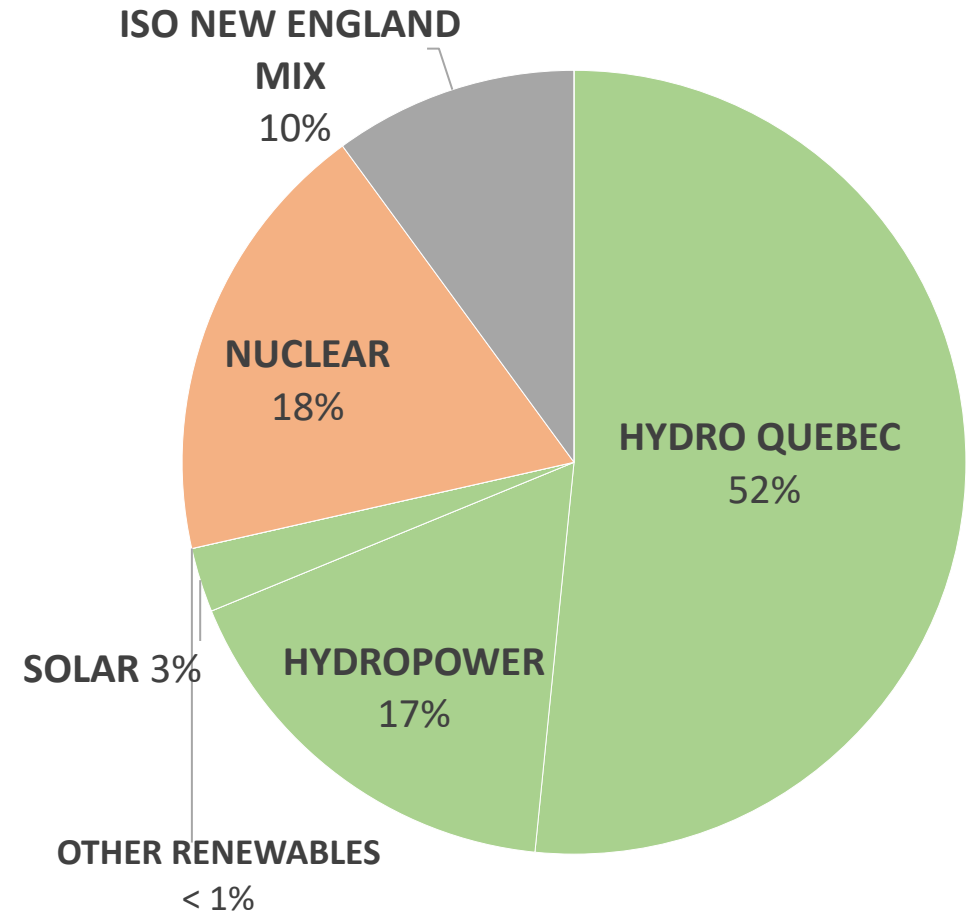
PSD 2023 Technical Analysis Scope of Work

- Analyze modification the requirements of 30 V.S.A §8005(a)(1)(B) - Tier 1 - to include a **100% clean or 100% renewable** requirement;
- Analyze modification of the requirements of 30 V.S.A. §8005(a)(2)(C) – Tier 2 - to:
 - a. **20% on and after January 1, 2030; and 30% on and after January 1, 2035;**
Other scenarios that may be considered
- Analyze new requirement **to purchase renewable energy from new facilities delivering generation in New England**
- Analyze the economic, equity, and environmental (incl emissions) impacts to Society, to Vermont, to Consumers, of:
 - Modification of the **definition of “new” facility**, including consideration of eligibility date, size, and location;
 - Modification of the requirements of 30 V.S.A. §8005 to be based upon total utility net purchases.
 - The impacts of **load management**, including but not limited to **battery storage**;
 - The feasibility and impacts of requiring utilities to **purchase renewable energy on a quarterly, monthly, and or hourly basis**;
 - The potential transmission and distribution **grid impacts**,
 - The **land use** and associated environmental and environmental justice impacts;
 - Impacts to reliability, resilience, and resource adequacy;
 - New, or modifications to existing **procurement tools** to support achievement of the RES including but not limited to 30 V.S.A. §8010 (net metering)
 - Other items that may be considered via stakeholder process

Process to be modeled after Climate Council “Task Group” structure.

Tier 1 – 100% Renewable

- Vermont Portfolio AFTER Renewable Credits, based on Total Load
 - ~3% of Portfolio from ISO-NE Mix if based on retail sales.
- ~5.3 million MWh Retail Sales (~5.8 million Total Purchases)
 - Assume no load growth
- Current Tier 1 RECs Over \$10/MWh, recently \$5-10/MWh.
- Increasing the standard from 75% to 100% of sales in 2032 could cost:
 - 5.3 million MWh * 25% = 1.325 million MWh increased requirement
 - At \$5: \$6.625 million in 2032
 - **At \$10: \$13.25 million in 2032, every year beyond**



What are we getting for \$13 million (or more)?

Summary

- The Department has been, and remains the appropriate entity to lead technical analysis
 - Informed by stakeholder and public processes. Welcome legislative, Renewable Energy, utility, other stakeholders and the general public.
 - Long history of overseeing objective, actionable reports. For example:
 - Annual **Renewable Energy Standard** Reports - 30 V.S.A. 8005b(b)(2)
 - Thermal Efficiency Task Force
 - Building Energy Labeling Working Groups
 - Code Updates
 - Numerous Storage Studies
 - Comprehensive Energy Plan
 - Climate Action Plan
- It is unclear what will be accomplished by net metering and Tier 1 proposed changes.
- Vermont should look at the Renewable Energy Standard and other procurement programs comprehensively, and then make appropriate recommendations for change.



Thank You
