Public Service Department Program Planning

Overview for Senate Natural Resources and Energy Committee April 14, 2021





How does PSD think about planning for programs or pursuing policies in the shortand long-term?





Vermont Energy Policy

Title 30, Section §202a:

- To ensure, to the greatest extent practicable, that Vermont can meet its energy service needs:
 - In a manner that is adequate, reliable, secure, and sustainable
 - Ensuring **affordability** and encouraging the state's **economic vitality**
 - Using energy resources efficiently and managing demands cost effectively
 - In a manner that will achieve greenhouse gas reductions requirements



Statutory Considerations & Directives

30 V.S.A. §218c – Least Cost Planning

30 V.S.A. §209 – Energy Efficiency

30 V.S.A. §8004 & 8005 – Renewable Energy

10 V.S.A. §578 – Greenhouse Gas Reduction Requirements

30 V.S.A. §202b State Comprehensive Energy Plan

30 V.S.A. §202 Electric Planning

And More....



Administration Priorities

- Protecting the vulnerable
- Affordability
- Economic Development
- Equity

Comprehensive Energy Plan - What is it?

- Title 30, Section 202b the Comprehensive Energy Plan (CEP) must include:
 - Comprehensive 20-year analysis and projections of the use, supply, cost, environmental effects all energy sources used in VT
- Title 30, Section 202 Electric Plan must include:
 - 20-yr assessment of *electric* demand, supply, strategies
- Last published in one document January 2016
 - Over 300 Recommendations 90% by 2050 Vision
 - CEP Required Every 6 years next due January 2022
- Must include standards and recommendations for Act 174 energy planning
- Must be consistent with GHG goals, Climate Action Plan, relevant goals of Title 24, Section 4302





CEP and Climate Action Plan

Related and overlapping, but distinct planning requirements imposed by statute, two different reports.

One does not obviate the need for the other. They will inform one another.

CEP

- 30 V.S.A. §202(b)
- Energy system planning & reliability of electric system given pathways to meet energy goals and energy service needs
 - Adequacy, reliability, security, sustainability
 - Affordability, economic vitality
 - Resource efficiency and cost-effectiveness
 - Greenhouse gas reduction requirements
- Consistency with requirements of Global Warming Solutions Act, and with Climate Action Plan
- Every 6 years

CAP

• 10 V.S.A. §592

- Sets forth specific initiatives, programs, and strategies, including regulatory and legislative changes, necessary to achieve the State's greenhouse gas emissions reduction requirements and build resilience
- To be informed by both the Council's analysis and "reports, plans, and information pertaining to greenhouse gas emissions reduction and climate resilience strategies" prepared by ANR and PSD, with specific reference to the CEP.

• Every 4 years



2022 CEP Modeling

- Scenario analysis
 - Working with ANR, NESCAUM, Stockholm Environment Institute using Low Emissions Analysis Platform (LEAP)
 - Reference, Do Nothing" case plus policy and technology scenarios
- Energy modeling for CEP, non-energy sectors already planned
 - LEAP is scenario-based modeling tool that can track consumption, production, and resources in all sectors
 - Plan to regionalize results after initial modeling effort is complete
 - Local and regional air pollutants in addition to GHG
- LEAP model, training included and license for a small annual fee allows for ANR & PSD to continue to have access to conduct future scenario analyses





Where Do Limited Public Resources Provide the Most Value while balancing objectives of State Energy Policy?

Low-hanging fruit – least cost investment

• Stable electric energy efficiency investments

Support for most vulnerable

- Affordable Clean Energy
- Weatherization + Health Opportunities proposal

Challenges Lead to Opportunities

- *Challenges:* Sheffield Highgate Export Interface, Distribution Constraints
- *Opportunity:* Grid Optimization locational time and value of resources & load, flexible load/resources via signals etc.

Greenhouse Gas Mitigation

• Electrification – Managing electric costs to encourage adoption

Broadband & Energy Convergence

• Grid Equity

Public Investment to Leverage Private Investment

- Heat Saver Loan
- VHFA Proposal

