Performance- Based Regulation State Working Group

Strategies for Developing Effective Performance Incentive Mechanisms – Part 2 (Vermont)

Expert Webinar
December 1, 2022

Agenda

3:00-3:10	Administrative / upcoming events
3:05 – 3:30	Expert webinar: presentations followed by Q&A
3:30 – 3:45	PBR SWG roundtable on performance incentive mechanisms

Facilitators

Elliott J. Nethercutt, NARUC

Danielle Sass Byrnett, NARUC

Speakers

Moderator: Hon. Abigail Anthony, Rhode Island

Speaker: Joan White, Vermont

Logistics and Participation

- Please mute when not speaking.
- During the presentation portion today, please feel free to drop any questions into the chat and ask questions during Q&A.
- We will record and post the presentation portion on NARUC's website.
- After the presentation and Q&A for speakers, we will 'close the door' for a roundtable discussion among members that will not be recorded.

NARUC Performance-Based Regulation State Working Group

Working Group Chair: Commissioner Abigail Anthony, Rhode Island

Working Group – 30 Jurisdictions:

- Arizona
- British Columbia, Canada
- Colorado
- Connecticut
- District of Columbia
- Delaware
- Georgia
- Hawaii
- Idaho
- Illinois
- Indiana
- Kentucky
- Massachusetts
- Maryland
- Maine
- Michigan
- Minnesota
- Missouri
- North Carolina
- Nevada
- Ohio
- Oregon
- Oklahoma
- Puerto Rico
- Rhode Island
- Texas
- Utah
- Vermont
- Washington
- Wisconsin

Please send any feedback or inquiries to enethercutt@naruc.org.

PBR State Working Group 2023 Updates

- New PBR website in development
- 2023 events to be announced in late-December

Upcoming NARUC & CPI Events

- **CPI Innovation Webinar: Green Bank: Financing a Reliable Future**
  - December 15, 2022 | 3:00pm (ET)
  - Registration: https://us02web.zoom.us/webinar/register/WN_coNgfNhJQsqY8J5PHCtsrQ

- **Webinar: Nuclear Energy: What does the Public Think?**
  - December 16, 2022 | 1:00pm (ET)
  - Registration: https://us02web.zoom.us/webinar/register/WN_bXVcoIlOSpGhcm-Spl2sSA

- **Webinar: Resilience for Regulators: Future Climate Modeling for Utility System Planning**
  - December 19, 2022 | 2:00pm (ET)
  - Registration: https://us02web.zoom.us/webinar/register/WN_HOVbxsCtR_2-jaRGyvix5Q

- **Webinar: Grid Architecture: Why It Matters**
  - January 19, 2023 | TBD
  - Registration: https://www.naruc.org/about-naruc/event-calendar/grid-architecture-why-it-matters/

- **NARUC Winter Policy Summit**
  - February 12-15, 2023 | Renaissance Washington Hotel, Washington, DC
  - Registration: https://www.naruc.org/meetings-and-events/naruc-winter-policy-summits/2023-winter-policy-summit/

Vermont Public Utility Commission

Performance Incentive Mechanisms

NARUC PBR State Working Group

Thursday, December 1, 2022

Joan White
Hearing Officer
Joan.white@vermont.gov

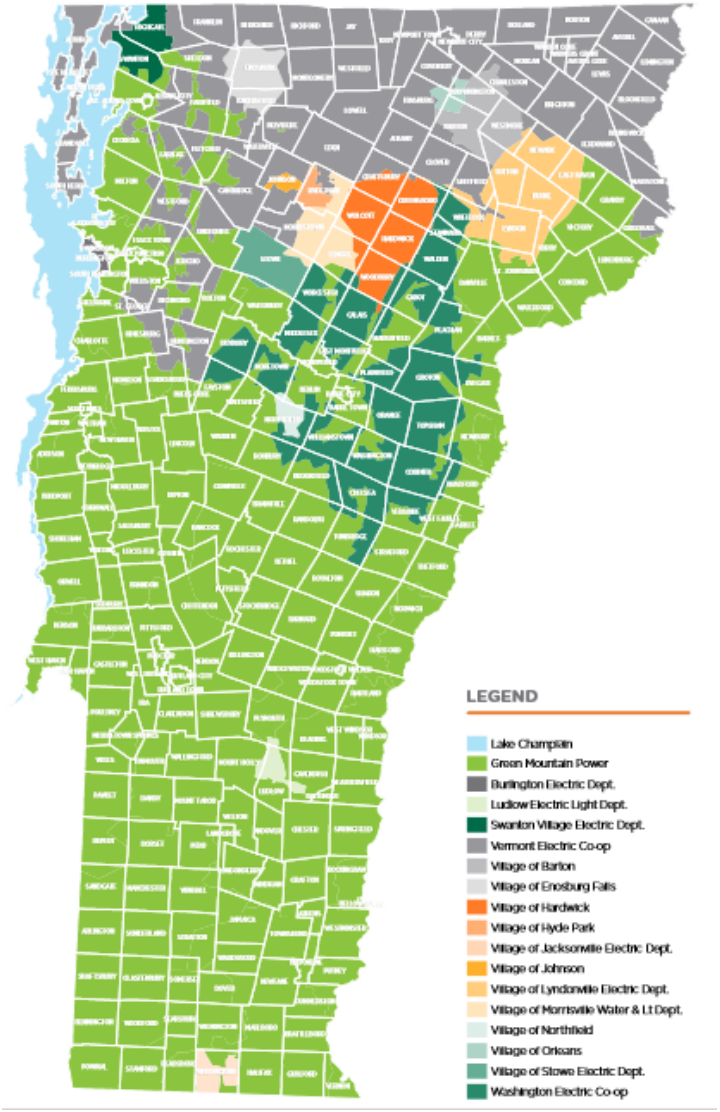
Agenda

1. The Commission
2. Vermont context
3. Statutory basis
4. Energy Efficiency Programs
5. Process
6. Metrics
7. Compensation
8. Electric Utilities
9. Lessons Learned



Public Utility Commission (PUC)

The Public Utility Commission is a three-member, quasi-judicial commission that supervises the rates, quality of service, and overall financial management of Vermont's utilities: electric, natural gas, telecommunications, and private water companies. The Commission also reviews the environmental and economic impacts of proposals to purchase energy supply or build new energy facilities.



Vermont Context

Small state ~ 1000 MW peak

One distribution utility (Investor-Owned Utility) with about 80% of the customers. 16 other distribution utilities (coops and municipal utilities)

One statewide bulk transmission provider (VELCO)

Vermont utilities are vertically integrated and regulated by the PUC using both traditional cost of service regulation, augmented by rules and integrated resource planning

Exists within the footprint of ISO-NE (six state regional market for wholesale services and bulk transmission)

93% of our electricity is carbon free (66% renewable, 27% nuclear)

Statutory basis for performance-based regulation

Efficiency – 30 V.S.A. §209(f)(2)

(2) …the use of compensation mechanisms for any energy efficiency entity appointed under subdivision (d)(2) of this section that are based upon verified savings in energy usage and demand, and other performance targets specified by the Commission.

Electric and Gas– 30 V.S.A. §218d(a)(1)

(1)…the Public Utility Commission may, after opportunity for hearing, approve alternative forms of regulation for an electric or natural gas company that…

(4) offers incentives for innovations and improved performance that advance state energy policy such as increasing reliance on Vermont-based renewable energy and decreasing the extent to which the financial success of distribution utilities between rate cases is linked to increased sales to end use customers and may be threatened by decreases in those sales;

Energy Efficiency Programs

Vermont has stand alone energy efficiency utilities

Rate design: all costs are recouped through an energy efficiency charge on customer bills. The charge is volumetric and the same for all customers served by that efficiency utility. The charge resets annually.

Performance metrics that target peak shaving

- -generally, the efficiency utilities use passive measures to meet these metrics.
- -these metrics are tied to around ½ of total compensation.

Process - Efficiency

- Litigated process – every three years called the Demand Resources Proceeding (DRP)
- Establishes budgets and QPIs (Quantifiable Performance Indicators).
- Includes our consumer advocate/state energy office, electric utilities, efficiency utilities and third parties.
- See VT PUC Case No. 19-3272-PET.
- Includes two 3-year performance periods.

What are the metrics?

Title	Performance Indicator	100% Target	Award Weight
Total resource benefit	Present worth of lifetime electric, fossil fuel, and water benefits	$305,117,950	25%
Annual electricity savings	Annual incremental net MWh savings	280,200	25%
Summer peak demand savings	Cumulative net summer peak kW demand savings	31,600	17%
Winter peak demand savings	Cumulative net winter peak kW demand savings	37,000	14%
Lifetime electricity savings	Lifetime incremental net MWh savings	3,497,600	9%
Greenhouse gas reductions	Electric energy and non-energy benefits, in metric tons of CO_2e	161,600	5%
Administrative efficiency	Administrative cost reductions as percentage of total budget	5% reduction of administrative budget	5%

Quantifiable Performance Indicators

Utility earns money for hitting these targets

What are the metrics?

Title	Minimum Requirement	Policy Goal Advanced	Performance Award Reduction
Minimum Electric Benefits	Total electric benefits divided by total costs is greater than 1.2	Equity for all Vermont electric customers as a group by ensuring that the overall electric benefits are greater than the costs incurred to implement and evaluate the EEU and the energy efficiency charge	Eliminates 100% of performance incentive award
Threshold Level of Participation by Residential Customer	Total residential sector spending is greater than $35,431,000	Equity for residential customers by ensuring that a minimum level of overall efficiency efforts, as reflected in spending, will be dedicated to residential customers	Reduces total performance incentive award at 100% target level by 18%
Threshold Level of Participation by Low-Income Customers	Total low-income services spending is greater than $11,514,000	Equity for low-income customers by ensuring that a minimum level of overall efficiency efforts, as reflected in spending, will be dedicated to low-income households	Reduces total performance incentive award at 100% target level by 18%

Minimum Performance Requirements:

Eliminates or reduces performance-based compensation if these targets are not met

Compensation

Total compensation is 4.8% of the overall budget

- Operations fee (not performance-based) set at 1.35% in 2021
- Performance-based compensation is the remaining 3.5% of overall budget
- Total performance is measured in 3-year periods, but utility can earn a portion of compensation each year.
- In years one and 2, can earn up to ¼ of total performance amount if making progress to 3-year goals.
- Claw-back provision – if they fall short of the three-year target, the PUC can order them to return the compensation.
- Phasing out of the operations fee. All compensation will be performance-based by 2025.

Electric utility performance metrics

Three-step process:

1. Establish what the metrics are
2. Benchmark performance for several years
3. Establish targets and compensation

Through Multi-year Regulation Plan cases

Every 3-4 years

See VT PUC Case No. 21-3707-PET

We are in Step 2 of this process with 2 years of data reported

What are the metrics?

Categories

Capital Expenses

Power Portfolio

Distributed Generation

Distributed Energy Resources (dynamic controls)

Electric Vehicles

Customer Service

Storage Deployment

Low-income Access

What are the metrics?

Examples

- Capital Spending: Estimated average days to interconnect DG systems (from point project is ready for physical interconnection)

- Power Supply: Emissions profile (lbs CO2/kWh delivered)
- Distributed Generation: Estimated average days to interconnect DG systems (from point project is ready for physical interconnection)

- Distributed Energy Resources: Combined hours of backup provided by batteries in customer homes during outage events

- Electric Vehicles: Number of EV home chargers connected to shared access platform

- Low-income Access: Year over year increase in number of customers utilizing LMI rebates/Tier 3

Lessons learned

1. Benchmarking what the targets should be is quite important
2. Benchmarking can take several cycles
3. Choosing a few metrics to start eases the process
4. Utilities really do respond to incentives
5. If a utility is always meeting the maximum value of the incentive, time to reconsider the target (e.g. raise the bar)
6. Establishing minimum performance standards around the basics is important

PBR State Working Group PBR SWG Roundtable on PIMs

Closed session; PBR State WG members only please

Please send any feedback or inquiries to enethercutt@naruc.org.