



Energy and Telecom – Broad Themes

LEGISLATIVE COUNCIL – JANUARY 2019

Market Structure

Natural Monopolies (Utilities)

- ▶ Type of monopoly with high fixed infrastructure (network) costs that, once established, discourage new entrants
- ▶ Private companies “affected with the public interest”
- ▶ Regulatory compact – utility accepts an obligation to serve in return the government’s promise to set rates that will compensate it fully for the costs it incurs to meet that obligation

Market-based Companies

- ▶ Prices are controlled naturally by the supply of and demand for services

Vermont Utilities

Energy Sector

- ▶ Electric companies
 - ▶ Distribution utilities (17)
 - ▶ Investor-owned (GMP)
 - ▶ Coops (2)
 - ▶ Municipal departments (14)
 - ▶ All, except BED and Stowe, are part of VT Public Power Supply Authority
 - ▶ Transmission utility (VELCO)
 - ▶ Efficiency utilities
- ▶ Natural gas company

Telecom Sector

- ▶ Landline telephone companies
 - ▶ Incumbent local exchange carriers (ILECs)
- ▶ Cable TV (no longer rate regulated because market deemed competitive)

Vermont Market-Based Companies

Energy Sector

- ▶ Fuel dealers that provide “delivered” fuels such as propane and heating oil
- ▶ Merchant generators

Telecom Sector

- ▶ Mobile phone companies
- ▶ Internet service providers

State Regulators

Utilities

- ▶ Public Utility Commission
 - ▶ Quasi-judicial entity (independent of the Administration)
 - ▶ 3 members – one full-time and two part-time, with staggered 6-year terms
 - ▶ Hearings; investigations; rulemaking
 - ▶ Self-funded with gross receipts tax (See 2018 DPS report)
- ▶ Department of Public Service
 - ▶ Public advocacy
 - ▶ Planning
 - ▶ Consumer affairs and public info.
 - ▶ Part of the Administration

All Businesses

- ▶ Attorney General
 - ▶ Consumer Protection Act
 - ▶ Complements the enforcement of federal law, in particular:
 - ▶ The FTC Act (bans unfair methods of competition and unfair or deceptive acts or practices in commerce)
 - ▶ The Sherman Act (bans monopolistic practices)

What is Regulated?

Utilities

- Retail rates
 - Traditional cost of service
 - Prudent
 - Used and useful
 - Reasonable return
 - Alternative or incentive regulation
- Financial management
- Inter-company practices
- Electric company planning and supply

Utilities and some non-utilities

- Quality and terms of service
- Consumer protection
- Facility siting
 - 248 – new transmission facilities; electric generation facilities; and natural gas pipelines (also some purchases and investments)
 - 248a – wireless telecom facilities

Market-based companies

- Must comply with the Consumer Protection Act
- Industry-specific energy and telecom laws
 - Propane Rules
 - No telecom “cramming”

Federal Regulators

Energy

FERC (Federal Energy Regulatory Commission)

- Regulates the interstate transmission of natural gas, electricity, and oil.

Regional – ISO-New England

- The Regional Transmission Operator (RTO) for New England
 - Manages the grid
 - Administers wholesale electricity market
 - Power system planning

Telecom

FCC (Federal Communications Commission)

- Regulates interstate communication services
- Interconnection and intercarrier compensation

All Businesses

FTC (Federal Trade Commission)

Department of Justice, Antitrust Division

Network Infrastructure

Energy

- ▶ Transmission
 - ▶ High voltage bulk transmission of electricity
 - ▶ Voltages of 115 kV (kilovolt) or higher - VELCO
 - ▶ (open access)
- ▶ Substations
 - ▶ Transformers (lower voltage)
- ▶ Distributions lines (or directly to large enterprises?)

Telecom (physical layer)

- ▶ Transmission
 - ▶ High capacity transport link
 - ▶ Fiber-optic cable
 - ▶ Backhaul/middle mile
 - ▶ State-owned (open access)
- ▶ Switching station (central office)
 - ▶ Circuit/packet switching
- ▶ Loops (last-mile facilities); or directly to enterprise customers
 - ▶ Unbundled network elements

Universal Service Policies

Energy

- ▶ Rural electrification
- ▶ LIHEAP – Fuel assistance
- ▶ Company discounts (electric and natural gas)
- ▶ VLITE – Vermont Low-Income Trust for Electricity

Telecom

- ▶ High-Cost Program/Connect America Fund
- ▶ Lifeline
- ▶ Relay service