Vermont's Delivery of Energy Efficiency Part I: Electric Utilities



NARUC Energy Regulatory Partnership Program

The Energy Regulatory Commission of the Republic of Macedonia and The Vermont Public Service Board

by

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Overview of Presentation

Section I: Institutional Structure Section II: Funding Section III: Performance

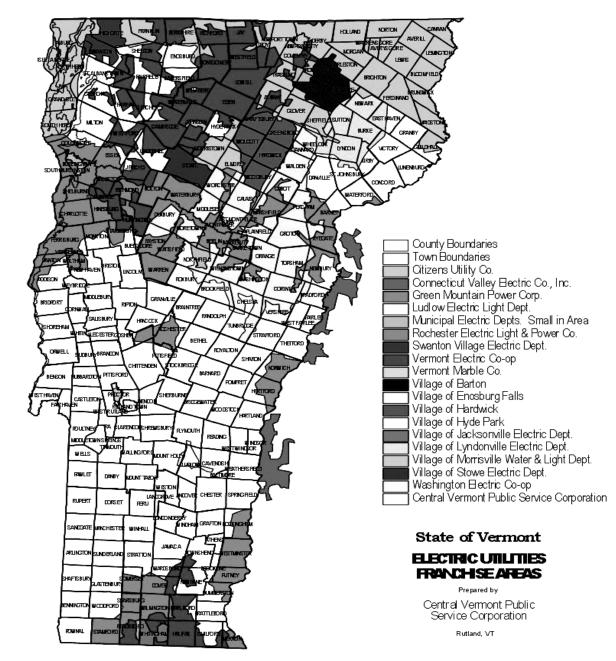


Section I: Electric Utility Institutional Structure (before Energy Efficiency Utility)

- * 22 franchised distribution utilities providing retail service in separate territories (now 21)
 - 5 (now 4) investor-owned distribution utilities
 - 2 member-owned distribution utilities (cooperatives)
 - 15 municipal government distribution utilities
- One electric transmission utility, owned by the distribution utilities
- Serving a total population of approximately 600,000



Vermont Electric Utility Service *Territories* (as they existed before the Efficiency Utility)





Section I: Institutional Structure – State Government Entities

- Vermont Public Service Board
 - decision-making tribunal
 - typically functions like a court
 - determines utility rates, approves resource plans
- Service Vermont Department of Public Service
 - public advocate before the Board
 - provided testimony on utility efficiency program design and delivery, verification of savings claims
 - by statute, issues plans stating policies and objectives for Vermont's energy future



Section I: Institutional Structure – Utility Efficiency Service Delivery

- Electric distribution utilities obliged to deliver electric energy efficiency services
- Utilities deliver within their own territories, via own personnel or contractors
- Utilities required by state to obtain efficiency resources through state permit process for development projects



Section I: Institutional Structure – Issues in Utility Efficiency Service Delivery

- Multiple service territories of utilities create issues for delivery of efficiency services, including:
- Programs, rebates, and incentives vary throughout small state
- Vendor, customer confusion
- Cost-effectiveness screening varies by territory



Section II: Funding Utility Energy Efficiency Delivery in Vermont

- Vermont electric utilities are compensated primarily by selling kilowatt hours
- Costs for efficiency were contained within utility rates for electric service
- Many utilities carried expenditures on books between rate cases
 - Accounts accumulated carrying costs until rate case
 - Once expenditures approved for rates, utilities received an amortization expense amount and a rate of return on unamortized balance
 - Increased costs to ratepayers over long term



Section II: Funding of Utility Energy Efficiency Delivery (cont.)

- "Accounts Correcting for Efficiency" was a mechanism to remove disincentive of lost sales due to efficiency
- Compensated utilities for net lost revenues incurred between rate cases due to their efficiency efforts
- Formula: net revenue loss = retail (gross) revenue reduction – system benefits during same period
- Added cost to ratepayers; was source of litigation



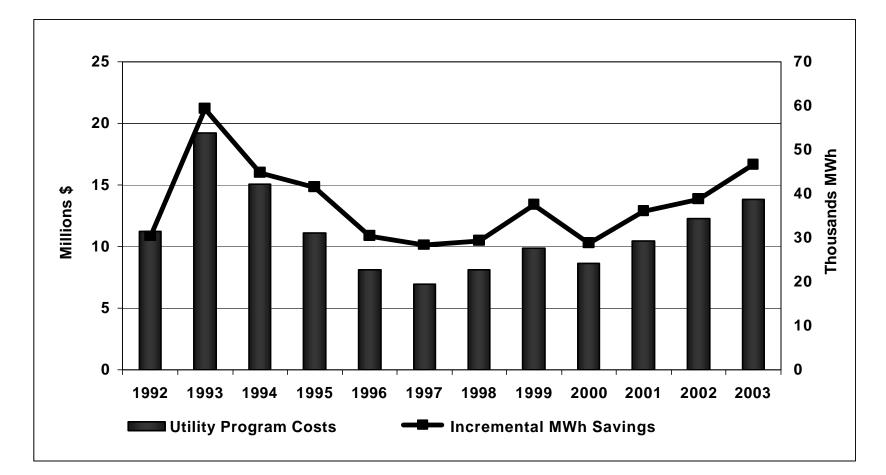
Section III: Vermont Electric Utility Performance in Delivering Efficiency

Variable utility performance:

- Mission conflict: sell electricity v. reduce use
- Delivery by investor-owned utilities yields mixed results
 - Investment declines with energy market changes in U.S., consideration of retail choice in Vermont
- Delivery by 14 of 15 municipal utilities limited; one municipality, Burlington, embraces efficiency
- Delivery by member-owned utilities strong when supportive boards elected



Section III: Energy Efficiency Performance 1992-1999 – Vermont Electric Utilities 2000-on – Vermont's Efficiency Utility





Section III: Electric Utility Performance Leads to Litigation and a Plan for Change

- Disputes and falling performance result in litigation before Vermont Public Service Board
- Penalties could be and were assessed in rate cases and management investigations
- Resource plan reviews to encourage acquisition of efficiency result in litigation
- In 1997, Vermont Department of Public Service issues a plan called *The Power to Save*, proposing an energy efficiency utility