



**VERMONT ENERGY**  
INVESTMENT CORPORATION

# **Thoughts on Alternative Models to Acquire Least Cost Demand-Side Resources**

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NASUCA – June 23, 2008

# Structural Models for Demand-Side Resource Acquisition

Four Basic Structures	Variations in Scope
<ol style="list-style-type: none"> <li>1. Distribution Utility (electric and/or gas)</li> <li>2. Government/Public Agency</li> <li>3. Independent, Third-Party Entity</li> <li>4. Regulated Efficiency Utility</li> </ol>	<ul style="list-style-type: none"> <li>• Energy Efficiency for One Fuel</li> <li>• Energy Efficiency for Multiple or All Fuels</li> <li>+ Renewable Energy</li> <li>+ Combined Heat and Power (CHP)</li> <li>+ Load Management</li> <li>+ Transportation</li> </ul>

# Utility Administration Considerations

- Conflict (real or perceived) between reducing customer energy use and increasing sales
- Complexity and added cost of revenue adjustment mechanisms
- Limited remedies to address poor performance, especially in the case of municipal utilities
- Utilities will always have many priorities and interests other than energy efficiency
- Performance-based incentive mechanisms can be used, *but...*
  - Penalties are challenging to many utilities
  - Investor-owned utilities typically want high incentives



# Vermont's Experience with Multiple Utility Administration

- Lack of capability in small utilities
- Variation in spending and programs among different utilities
- Confusing to customers
- Confusing to equipment vendors, design and engineering professionals
- Conflicting signals to the market
- Relatively high program design and administrative costs
- Lack of systematic, coordinated approach to statewide markets
- Very high regulatory cost



# Independent, Third-Party Administration

- Can be sole-purpose entity with high mission alignment
- Can implement either with internal staff and/or by contracting with outside entities
- Relatively easy to establish performance-based incentives and penalties
- Allows greatest flexibility to ramp up or down staff and budgets
- If an entity does not already exist, involve start-up costs and risks
- States where this structure has been implemented have demonstrated considerable success

# Performance Incentives as a Percent of Program Costs

Utility or State	Penalty at <65%	Minimum 75%	CA Minimum 85%	Goal Achieved 100%	Above Goal >110%
CA	6%	0%	9%	12%	15%
NSTAR	(¢/unit short)	4%	-	5%	6%
NGRID	-	4%	-	5%	6%
UI	-	2%	-	5%	8%
CL&P	-	2%	-	5%	8%
VT	-	1.3%	(scaled)	2.5%	-
OR	-	0%	0%	0%	0%

## Vermont's Efficiency Utility Model

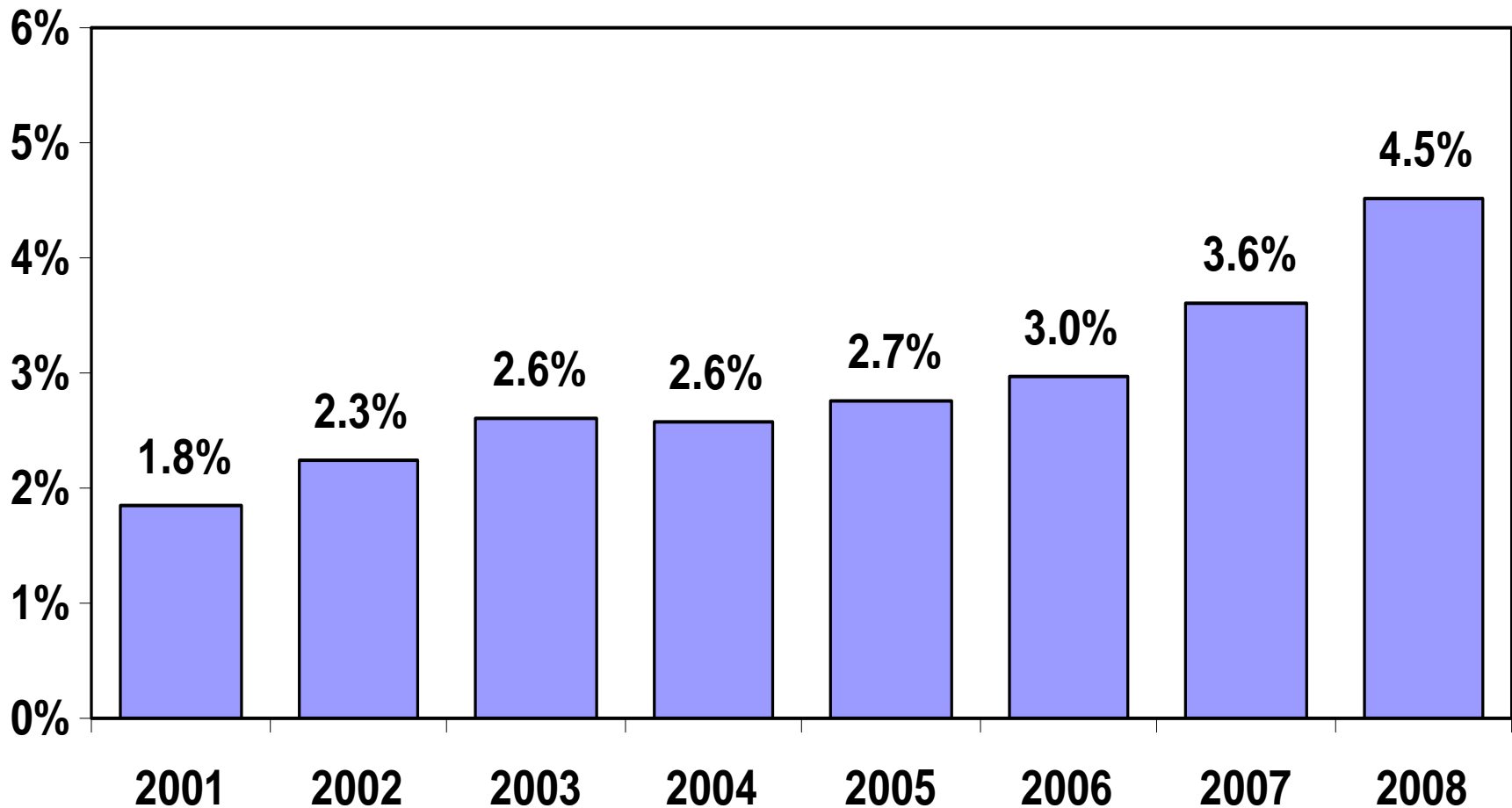
- Established in 1999 by Regulatory Order (Docket 5980) and authorizing statute (30 VSA § 209 d 2) – no sunset
- Fulfills electric utilities' obligations to implement system wide electric efficiency as part of a least-cost energy supply portfolio
- Implemented through a competitively-bid, performance-based contract for *results*
- Moving toward franchise-like Efficiency Utility under performance-based regulation

## Scope of Responsibilities

- Acquisition of maximum cost-effective statewide electric efficiency resources
- Targeted demand reduction to avoid or defer T&D system investment
- Leverage maximum Total Resource Benefits
- Market transformation
- Provide capacity resources to regional market
- Mandate expanded in 2008 to address all fuels

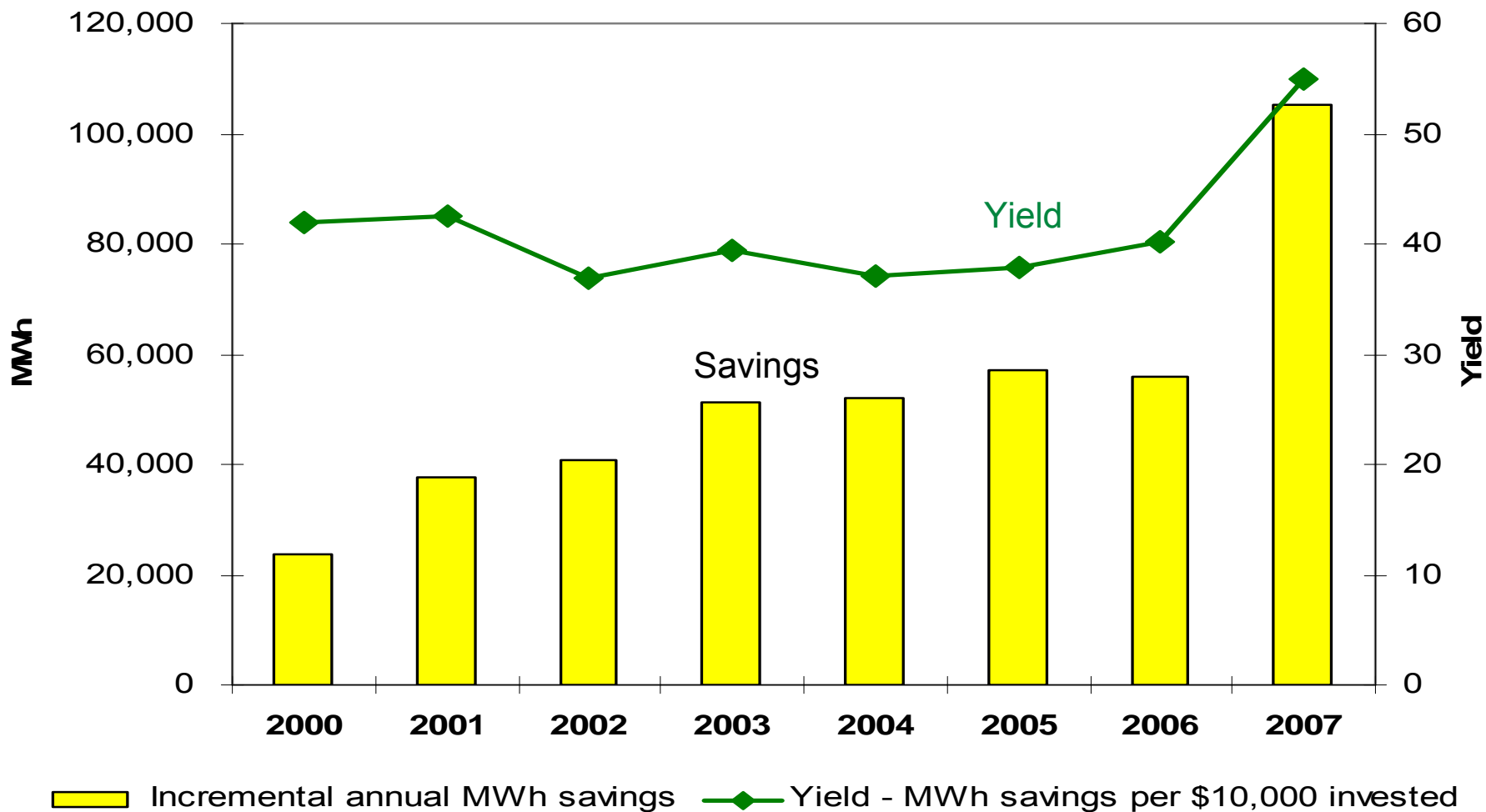
# Efficiency Investment in Vermont

(Percent of Total Electric Utility Revenues)



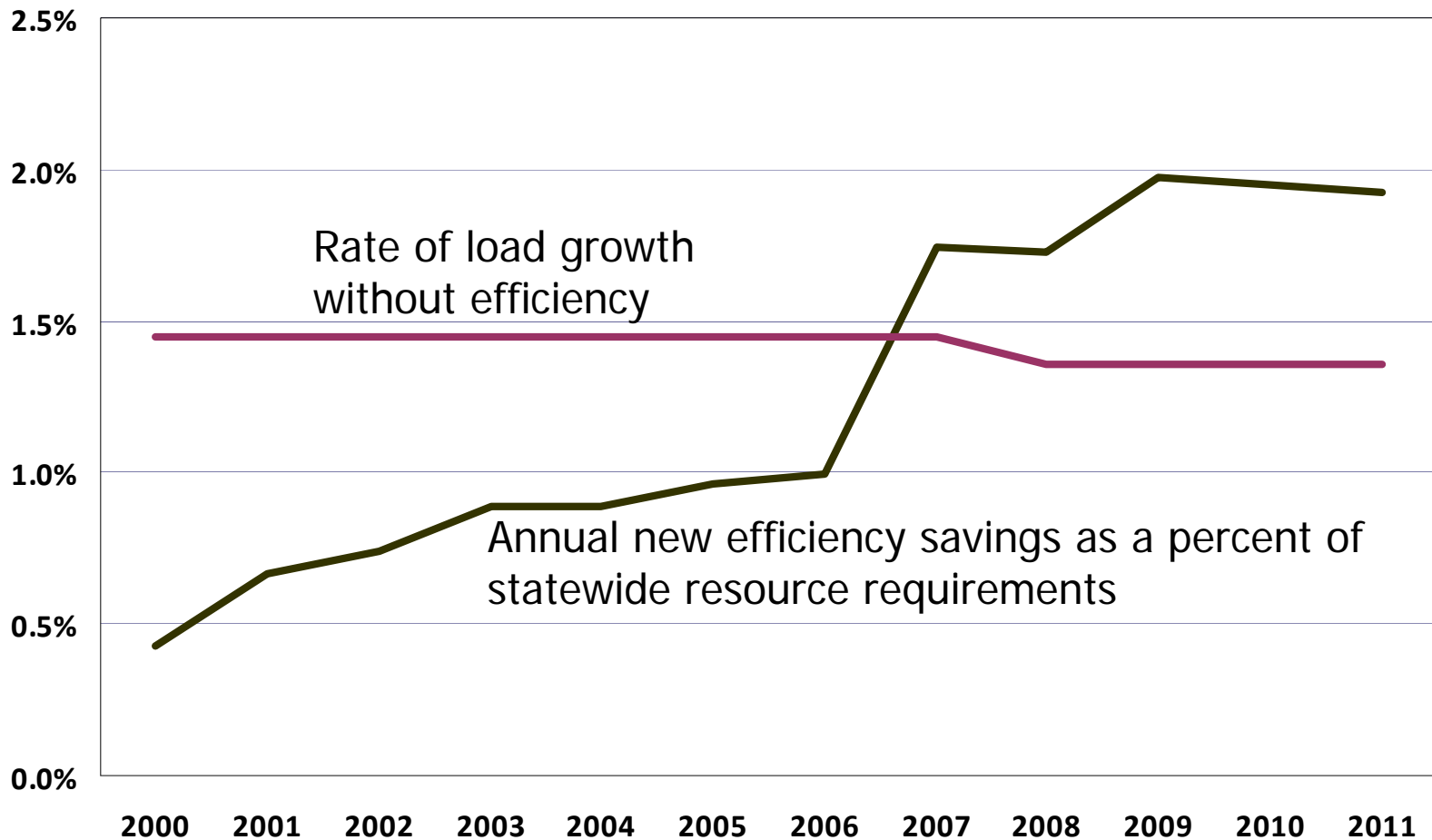
2001-2006 from Efficiency Vermont Annual Reports and Vermont DPS, 2007 from Preliminary Report, 2008 Estimated

# Vermont's Annual Energy Savings and Yield Rates

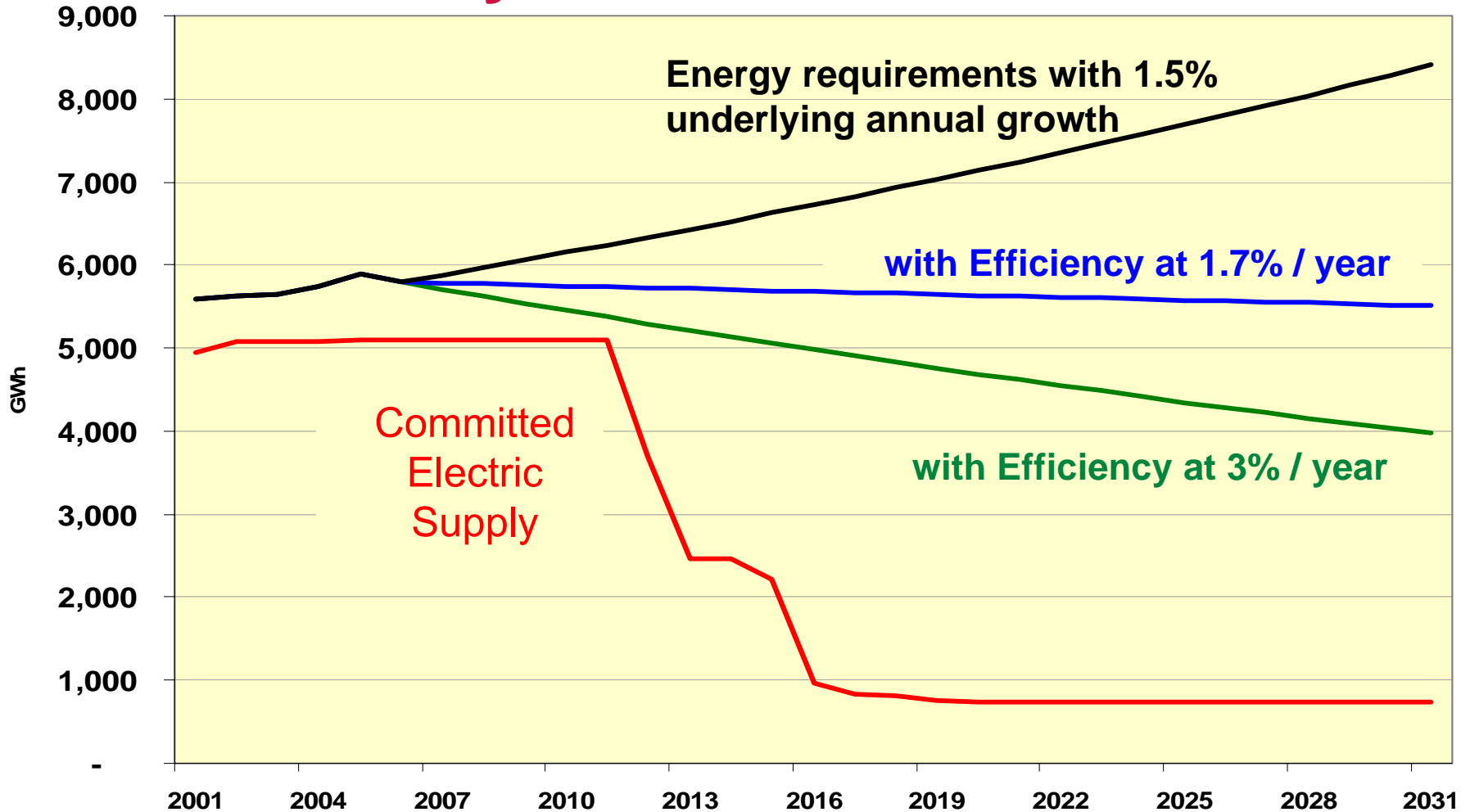


2001-2006 from Efficiency Vermont Annual Reports and Vermont DPS, 2007 Estimate from Preliminary Report

# Vermont Turns Load Growth Negative



# Potential Impact of Energy Efficiency in Vermont



# Cost and Savings Performance

