Regional Cooperation to Promote Energy Efficiency in New England

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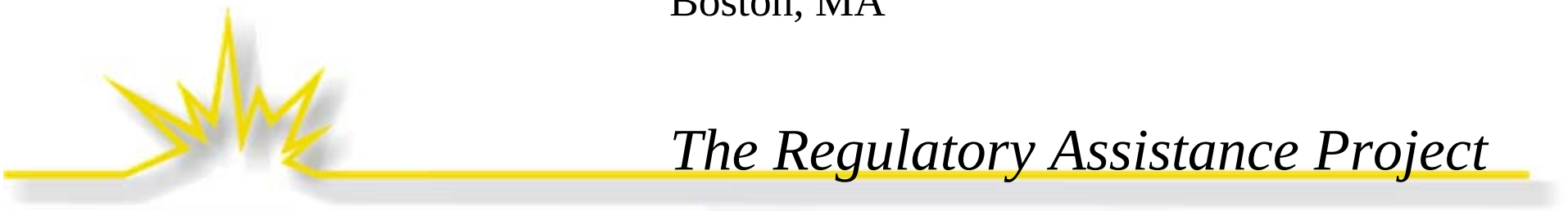

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Introduction

Regulatory Assistance Project

RAP is a non-profit organization, formed in 1992, that provides workshops and education assistance to state government officials on electric utility regulation. RAP is funded by the Energy Foundation, US EPA & US DOE.

Richard Sedano was Commissioner of the Vermont Department of Public Service, 1991-2001. He also serves on the Board of NEEP.

New England: States are Linked in Energy Markets

- Electric markets are linked
- Fossil fuel markets are linked
- Wholesale and retail distribution markets for energy efficient appliances and equipment are linked
- States work well and often together
  - At this moment, let's not forget compromises that have helped in the past

Regional Markets: Benefit from Coordination

- In any regional market, if all states have beneficial policies, all states fully benefit from their own actions
- If only some states have beneficial policies, the beneficial effects spread out over the whole market
  - Pro-active states lose some of the benefits to lagging states, so they should encourage others
- Does interstate competition for electric rates get in the way of C-E investments in energy efficiency?

Big Goals

- States are looking at climate change goals
  - 80% reduction in CO_2 emissions by 2050
  - This is a big goal!
  - Do we know the sales levels that will get there?
- Renewable portfolio goals are also significant
- Conversely, required shift from or scrubbing of fossil fuel generation is big

Energy Efficiency: A Key Contributor to Big Goals

- Significant potential for more energy efficiency
  - If avoided cost rises due to natural gas price increases, or
  - If avoided cost rises because renewable energy is deemed the marginal source, rather than a fossil fuel source, then
  - there is more potential energy efficiency
  - April 27, 2007 meeting: how to double EE in NE?

Energy Efficiency: A Key Contributor to Big Goals

- Energy efficiency in big quantities
  - Economical path to climate change goal
  - Materially reduces quantity of renewable energy needed to meet a given portfolio standard percentage
  - Enables orderly phase out of high heat rate fossil fuel generation
- Regional market suggests support region-wide will be most valuable

All Cost Effective Energy Efficiency

- A goal consistent with the other big goals facing the six states
  - In place in the smallest state, VT
- This policy will lead states to **optimal** levels of energy efficiency investment
- Graduates from administrative targets that may have seemed like a floor but have turned out to be a ceiling

All Cost Effective Energy Efficiency + Targeting

- Raise “all cost effective” screening criteria in load pockets to avoid need for transmission and remote generation
  - Recognizes locational long run marginal cost
  - Consider paying for these resources as transmission is funded
- Deal with concerns from rural areas that uplifted resources are favoring cities

Pricing: A Supportive Policy

- Long run importance of Market Transformation
  - Supported by Programs
  - Supported by Pricing
    - And codes and standards and public interest messages, etc. but I had to draw a line somewhere

Pricing: A Supportive Policy

- Customers/Citizens should have signals that motivate action, and tools to help them act
  - Prices and public messages are signals
  - Programs provide tools to promote action
- By themselves, prices may have modest conservation effect (they will probably reduce peak), but with coordinated programs, they can help the cause
- Be sensitive to at risk consumers

How Does New England Pay for Transmission?

- Reliability is a common good
  - So we share its cost
  - Do reliability challenges emerge system-wide or locally?
- Where reliability problems emerge because of growth in load pockets, an equity issue emerges.

EE Can Substitute for Transmission: Implication

- If the customers in a load pocket **can** implement intensive load reducing investments that would avoid a step change in transmission and remote generation need, does the wholesale market send an incentive to make those investments?
- Generally, no (this is different from capacity)
  - Uh oh

Wholesale Disconnect

- New transmission costs are socialized if they support stability, alternatives not
  - Does socialization provide adequate motivation for local areas driving reliability threats to deploy non-wires solutions?
  - Today, we are relying on states to provide that motivation, potentially contrary to the immediate interests of its regulated customers since the burden is entirely local.

Vermont Statute: Act 61 from 2005

Sec. 8. ADVOCACY FOR REGIONAL ELECTRICITY RELIABILITY POLICY

It shall be the policy of the state of Vermont, in negotiations and policy-making at the New England Independent System Operator, in proceedings before the Federal Energy Regulatory Commission, and in all other relevant venues, to support an efficient reliability policy, as follows:

- (1) When cost recovery is sought through regionwide regulated rates or uplift tariffs for power system reliability improvements, all available resources – transmission, strategic generation, targeted energy efficiency, and demand response resources – should be treated comparably in analysis, planning, and access to funding.

Vermont Statute: Act 61 from 2005

- (2) A principal criterion for approving and selecting a solution should be whether it is the least-cost solution to a system need on a total cost basis.
- (3) Ratepayers should not be required to pay for system upgrades in other states that do not meet these least-cost and resource-neutral standards.
- (4) For reliability-related projects in Vermont, subject to the review of the public service board, regional financial support should be sought and made available for transmission and for distributed resource alternatives to transmission on a resource-neutral basis.

Vermont Statute: Act 61 from 2005

- (5) The public service department, public service board, and attorney general shall advocate for these policies in negotiations and appropriate proceedings before the New England Independent System Operator, the New England Regional Transmission Operator, the Federal Energy Regulatory Commission, and all other appropriate regional and national forums. This subdivision shall not be construed to compel litigation or to preclude settlements that represent a reasonable advance to these policies.

Vermont Statute: Act 61 from 2005

- (6) In addressing reliability problems for the state's electric system, Vermont retail electricity providers and transmission companies shall advocate for regional cost support for the least cost solution with equal consideration and treatment of all available resources, including transmission, strategic distributed generation, targeted energy efficiency, and demand response resources on a total cost basis. This subdivision shall not be construed to compel litigation or to preclude settlements that represent a reasonable advance to these policies.

What if every state did this?

Policy alignment

- To meet or exceed these big goals, policy alignment and coordination within and among states will be necessary
  - *Imagine cute icon of collaboration leading to success*

Regional Coordination

- At least one “somebody” needs to take this on

Forums: Someone(s) Have to Make It Work

- New England Govs (with Eastern Canada)
  - The best vehicle for regional goals
  - What about CONEG? How to reach Mid-Atlantic? Mid-Atlantic Distributed Resources Initiative?
- NECPUC
  - NESCOE
  - Leading to ISO-NE for planning/targeting EE
- RGGI -- already effectively supporting EE via the "consumer allocation"
- NESCAUM -- thanks for stimulating this meeting!
- NEEP -- suggesting regional M&V

Information sharing and Best practices

- Structural pooling of information can enhance performance of programs, improve regulatory oversight, and yield synergies and new ideas
  - Fresh definition of “all cost effective”
  - Climate, NO_x, reliability, water other co-benefits of EE (valuation for societal test)
  - Impacts of new policies, like RGGI and FCM
  - Codes and Standards implementation
  - Application to unregulated fuel end uses

Standard Measurement and Verification

- NEEP project investigating feasibility and viability
  - Standardized reporting has merit for using resulting information for regional purposes
  - Already a track record of common M&V practices among utilities in a given state
  - Will states see value and support in EE budgets?

Regional Goal

- Can several states (governors?) agree in a regional goal regarding
  - Energy efficiency savings
  - Energy efficiency spending
  - Distributed resource savings (EE+DR+DG)
  - Usage trends (i.e. no growth, region-wide)
  - Fuel by fuel or economy wide?
- How big a region can collaborate effectively?

Thanks for your attention

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