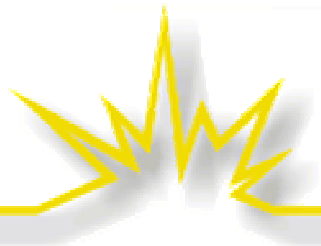


# RPS Policy Trends

CONEG Renewable Energy Generation Roundtable

June 1, 2005

Richard Sedano



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# Introduction

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## 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 and the US DOE.

Richard Sedano was Commissioner of the Vermont Department of Public Service, 1991-2001, and presently serves on the Montpelier Planning Commission

# CT, RI and MA Renewable Portfolio Standard Requirements

	Connecticut		Rhode Island		Massachusetts
	Class I	+ Class I or II	New + New or Existing		New Renewables
At end of year					
2003					1.0%
2004	1.0%	3.0%			1.5%
2005	1.5%	3.0%			2.0%
2006	2.0%	3.0%			2.5%
2007	3.5%	3.0%	1.0%	2.0%	3.0%
2008	5.0%	3.0%	1.5%	2.0%	3.5%
2009	6.0%	3.0%	2.0%	2.0%	4.0%
2010	7.0%	3.0%	2.5%	2.0%	5.0%*

Sources: State statutes: CT, Public Act No. 03-135 (Substitute SB 733 of 2003); MA, M.G.L. Ch. 25A, Section 11 (Chapter 164 of the Acts of 1997); RI, G.L. Title 39 Chapter 26 Section 4 (2004-H7375 SubA).

\*Massachusetts may choose to forego the 2010 increase

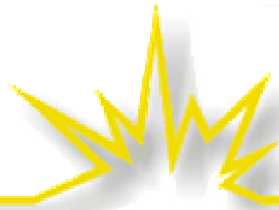


# Surrounding States with Portfolio Requirements

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- New York: increasing from 17-19% today to 25% by 2013 – over 3000 MW expected
- New Jersey: 4% new by 2008
- Pennsylvania

Plus, possible RPS revision in Maine, possible new RPS in Vermont eight years out



# Local Resource Have Value

- Assume all RPS resources for New England come from New England
  - ❖ What is the effect on the economy?
- RAP set out to answer this question
  - ❖ New report: **ELECTRIC ENERGY EFFICIENCY AND RENEWABLE ENERGY IN NEW ENGLAND: An Assessment of Existing Policies and Prospects for the Future** (see [www.raonline.org](http://www.raonline.org), go to Publications)





# Local Resources Have Local Value

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## Renewable Generator Total Impact: Output (000's of 2001 Dollars)

Year	Direct	Indirect	Induced	Total
2000 – 2004	166,875	31,833	148,437	347,146
2005-2010	2,133,717	-184,487	1,759,955	3,709,182
<b>Total</b>	<b>2,300,592</b>	<b>-152,654</b>	<b>1,908,392</b>	<b>4,056,328</b>

## Renewable Generator Total Impact: Employment (Job-years)

Year	Direct	Indirect	Induced	Total
2000 – 2004	686.8	242.6	1,503.0	2,432.1
2005-2010	-2,775.9	-2,595.1	16,135.8	10,764.4
<b>Total</b>	<b>-2,089.1</b>	<b>-2,352.5</b>	<b>17,638.8</b>	<b>13,196.5</b>

## Renewable Generator Total Impact: Labor Income (000's of 2001 Dollars)

Year	Direct	Indirect	Induced	Total
2000 – 2004	30,510	12,196	62,072	104,781
2005-2010	-374,563	-102,595	720,593	243,439
<b>Total</b>	<b>-344,053</b>	<b>-90,399</b>	<b>782,665</b>	<b>348,220</b>



# Environmental Effects

**Net Emissions Reductions due to Existing,  
Planned and Imputed Renewable Generation to  
meet Portfolio Standards, 2000-2010 (tons)**

	NO <sub>x</sub>	SO <sub>2</sub>	CO <sub>2</sub>
<b>2000-2010 Total</b>	5,603	8,532	9,163,126

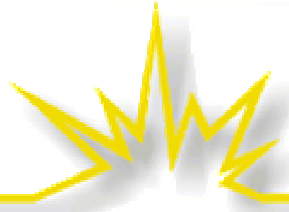




# Supply Challenges: Other states need their own resources

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- Wind siting: ridge lines, off shore
  - ❖ Transmission from remote places, size, lights
  - ❖ The business model is different from Iowa
- Biomass: technology, emissions
- Landfill gas: supply
- Fuel cell, microturbines: technology, cost
- Solar PV: technology, cost
- Hydroelectric: cost, licensing



# Other Issues

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- Deliverability: connection to physical mkts.
- Incentives (tax, rebates, other)
- Financing (an issue for all supply)



# Markets: Good, Seams still a problem

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- Tradable RECs
- Electronic trading (GIS, GATS, NY?)
- Across Seams trading
  - ❖ Domestic
  - ❖ With Canada
- Alternative Compliance Cost
  - ❖ Effect on Supply
  - ❖ Effect on REC clearing price (especially with short supply)



# Best Recent Report

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- MA DOER 2003 Annual RPS Compliance Report (Feb 2005)
- Also very useful recent experience in first round of NY REC acquisition



# Thanks for your attention

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❖ RAP Mission: *RAP is committed to fostering regulatory policies for the electric industry that encourage economic efficiency, protect environmental quality, assure system reliability, and allocate system benefits fairly to all customers.*