

# **Regional Differences in Wind Development in PJM, New York, and New England**



**ENERGY BAR ASSOCIATION  
RENEWABLE ENERGY & DEMAND RESPONSE  
MANAGEMENT COMMITTEE AND  
THE NORTHEAST CHAPTER**

**NESCOE**

**FEBRUARY 3, 2010**

Anything I say represents my views,  
not necessarily NESCOE's.

# What's NESCOE?

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- New England's FERC-approved Regional State Committee
- Governed by a board of Managers, appointed by the Governor of each New England state
- Substantive focus: system planning & expansion, resource adequacy
- Mission: **“NESCOE’s mission will be to represent the interests of the citizens of the New England region by advancing policies that will provide electricity at the lowest possible price over the long term, consistent with maintaining reliable service and environmental quality.”**
- Information, communications, at [www.nescoe.com](http://www.nescoe.com)

# New England's State Laws & Policies Support Renewable Development

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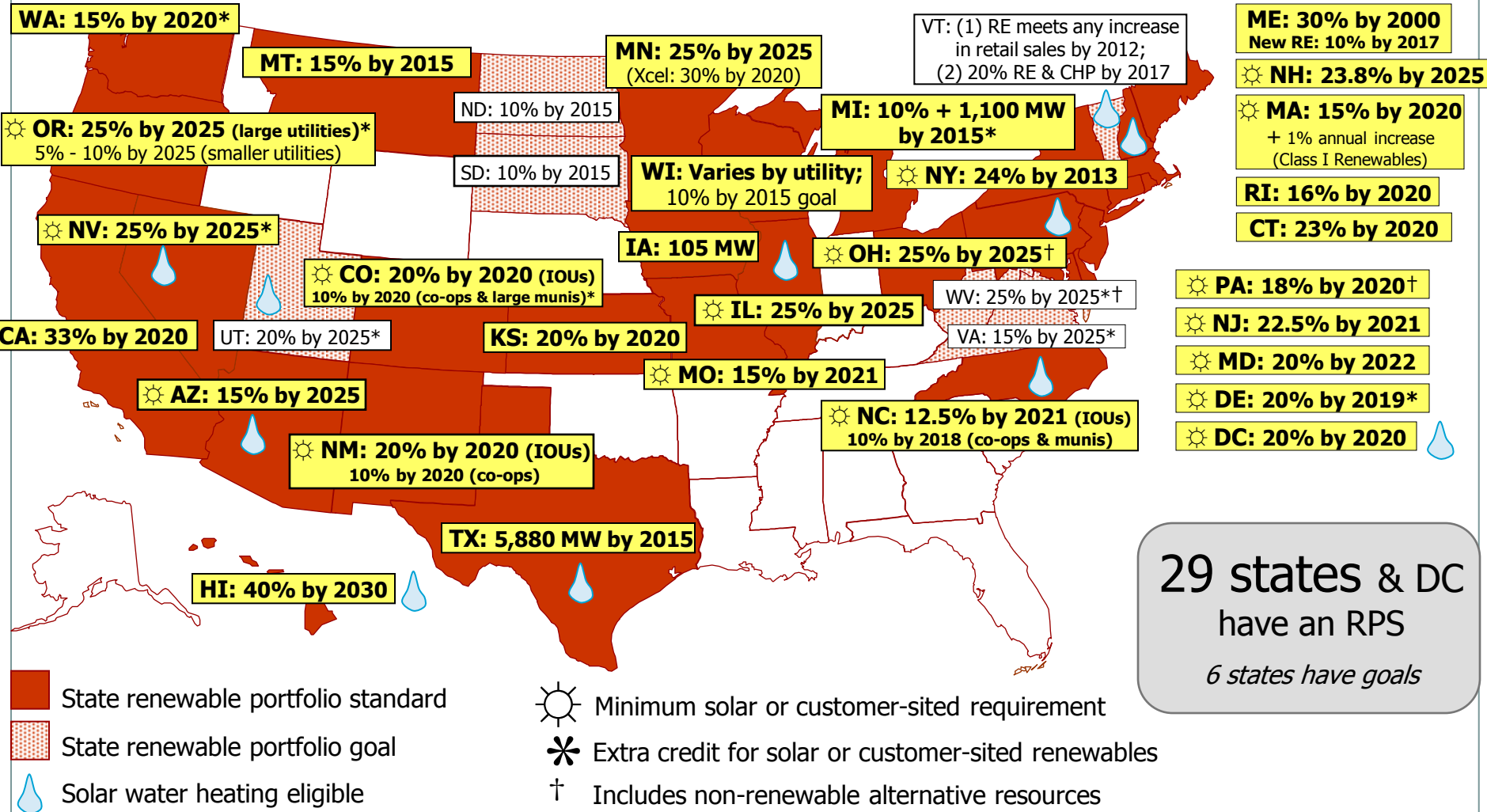
- Each New England state has historically encouraged development of renewable resources in & outside state borders
  - ✦ clean energy grants, net metering rules, renewable portfolio standards, etc, and more recently, long-term contract opportunities
- Wind is eligible under all definitions of renewable energy credits in New England's renewable portfolio standards
  - ✦ Provides revenue stream from REC sales



# Renewable Portfolio Standards

Slide from: North Carolina Solar Center / Interstate Renewable Energy Council

[www.dsireusa.org](http://www.dsireusa.org) / January 2010

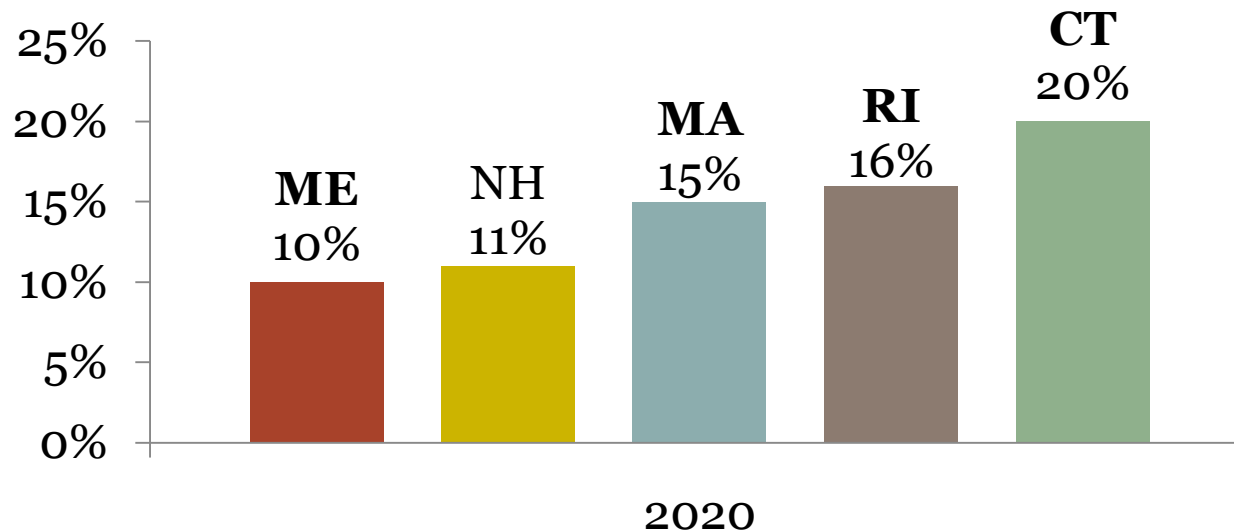


**29 states & DC**  
have an RPS  
*6 states have goals*

# New England Renewable Portfolio Standards

Slide Courtesy of ISO-NE

## State Renewable Portfolio Standards



# Planning Analysis & Wind Development

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## Transmission Planning

- ISO-NE's tariff enables transmission analysis beyond system reliability
- ISO-NE's planning process supports analysis of transmission to integrate the region's renewable resources into the grid in the form of **economic studies**

## Wind Development

- Studies inform but do not determine who will build what, where
- New England will identify renewable resources & associated transmission that can serve customers most cost-effectively through **competitive markets or processes**

## ISO –NE Studies



While ISO-NE's transmission planning process & the process by which New England will identify renewable resources that can serve customers most cost-effectively are separate, ISO-NE is contributing significant helpful analysis to policy makers & the market in connection with wind development.



# ISO-NE's 2009 Economic Study

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- Conducted per New England Governors' request, assumptions developed by states
- **Purpose:** obtain environmental, economic data associated with wind development in & around New England (2,000 MW to 12,000 MW of on- and off-shore wind) & associated transmission
- Helped identify significant sources of renewable energy available to New England, means to distribute them, estimated costs
- Provided the technical basis for the Governors' Blueprint

# ISO-NE's New England Wind Integration Study

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- Wind scenarios & transmission overlays
- Comprehensive, multi-state
- Highlights operational effects of large scale wind
- Five study tasks:
  - ✦ Wind integration survey
  - ✦ Technical interconnection requirements (complete)
  - ✦ Build models (complete)
  - ✦ Build scenarios & analyze for reliability
  - ✦ Simulate scenarios & observe effects

## New England States

working to  
facilitate wind  
development



The New England states are working together on means to facilitate development of renewable resources in & around the region that can serve customers cost-effectively and in a way that respects our competitive market structure.

# The Governors' Blueprint Path

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September 2008

NEGC Resolution on renewable development

February 2009

Governors communicate with President Obama, Congressional leaders

March 2009

States request ISO-NE perform technical analysis

July 2009

ISO-NE issues draft Renewable Development Scenario Analysis

September 2009

Governors Adopt Blueprint by Resolution

Today

Work on joint or separate but coordinated procurement

# The Blueprint on ISO-NE's Analysis

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**The Blueprint observed some facts made clear through ISO-NE's technical analysis. For example...**

- ✦ New England has vast renewable resources and if developed at conservative levels, there are **ample resources to enable New England to meet renewable energy goals**
- ✦ More aggressive investment **could enable New England to export renewable power** to neighboring regions
- ✦ The expansion of near off-shore wind resources could be accomplished incrementally with lower-voltage and lower-cost transmission interconnections directly into heavy load centers along the coast

# New England has Options

slide courtesy ISO-NE; refer also to RDSA, dated September 1, 2009, page 23

<b>Description</b> <i>Partial list of scenarios</i>	<b>New Capacity</b> (Megawatts)	<b>Percent of New England Energy (%)</b>	<b>Preliminary Transmission Cost Estimates</b> (Billions)
<b><i>From New England:</i></b>			
4,000 MW of offshore wind <i>plus</i> 1,500 MW of inland wind	5,500 MW	12%	\$6 B
12,000 MW of wind	12,000 MW	23%	\$19 B to \$25 B
<b><i>From New England and Eastern Canada:</i></b>			
5,500 MW of wind (from above) <i>plus</i> 3,000 MW of additional imports from Québec and New Brunswick	8,500 MW	15%	\$7 B to \$12 B
12,000 MW of New England wind <i>plus</i> 3,000 MW of additional imports from Québec and New Brunswick	15,000 MW	26%	\$17 B to \$36 B

# The Blueprint on Facilitating Development

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**The Blueprint also identified means within states' authority to facilitate development of renewable resources in & around the region, with a focus on ...**

- ✦ Opportunities to conduct joint or separate but coordinated **competitive procurement** of renewable power
- ✦ Opportunities to **coordinate siting** reviews for interstate transmission facilities

# Ongoing Work on Coordinated Renewable Procurement...

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**New England formed a state *Renewable Power Procurement Workgroup* to continue work on opportunities identified in the Blueprint.**

New England Governors' Blueprint Resolution  
Adopted September, 2009

**BE IT FURTHER RESOLVED** that the New England Governors authorize their regulatory and policy officials to use the Blueprint as a resource to help support development of New England's renewable resources in their public advocacy, rule-making, policy development and other initiatives; and

**BE IT FURTHER RESOLVED** that the New England Governors authorize their regulatory and policy officials to review the availability of renewable resources in the region, including those identified in the Blueprint, and to consider potential mechanisms for the joint or coordinated but separate competitive procurement of renewable resources, and to report the results of such a review to the Governors within the next twelve months.



## ...and to inform discussions with Canadians

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**The *Workgroup* will also work on specific means to consider opportunities that may be mutually beneficial to New England and our neighbors to the north.**

### New England Governors & Eastern Canadian Premiers Resolution

Adopted September, 2009

**BE IT FURTHER RESOLVED THAT** the New England Governors and Eastern Canadian Premiers wish to provide clarity to renewable energy producers and through the NICE, will initiate a meaningful dialogue between the states and provinces on the types of contract structures, pricing mechanisms and regulatory approvals that may offer the best opportunities for success in the New England and Eastern Canadian electricity marketplaces; and

**BE IT FURTHER RESOLVED THAT** this dialogue will consider potential terms and conditions for the procurement of regional power and a sample regional *Request for Proposal* for the procurement of renewable power (including energy, capacity, reserves, etc.) that could serve as a model for future solicitations.

# What's the impact of New England's work to date?

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It's early.

But, New England has a strong cooperative inclination to facilitate development of our renewable resources.

And a common interest in our competitive markets & processes - rather than planners - identifying those that would serve consumers cost-effectively.

If our processes move ahead uninterrupted by the allocation of costs to reach distant wind resources, we expect cost-effective renewable resources to move ahead as well.

# A Word on Merchant v. Other Projects

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- ✦ New England states are indifferent as to who builds projects to reach renewable resources
- ✦ The NU/NSTAR/HQ proposal to build a merchant line and bundle transmission & energy costs into a delivered-energy product is *one* example of a project type – whoever the sponsor & where ever the project – the states would welcome, particularly if negotiations yield the results described publicly and the delivered price is competitive with the price of energy

# Interregional Planning

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- New England states will participate fully in the new eastern interconnection planning processes
- ISO-NE's 2009 Economic Study is a useful example of the kind of analysis likely to provide value in interconnection-wide planning

# Questions?

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