

New England States Committee on Electricity



CONVERSATION WITH
**NORTHEAST ENERGY &
COMMERCE ASSOCIATION**

APRIL 8, 2010

Anything I say represents my own views.
Not necessarily NESCOE's.

Overview

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1. **ABOUT NESCOE**
2. **GOVERNORS' RENEWABLE ENERGY BLUEPRINT**
3. **EASTERN WIND INTEGRATION & TRANSMISSION STUDY**
4. **EASTERN INTERCONNECTION PLANNING**
5. **A WORD ON ISO-NE'S REGIONAL SYSTEM PLAN**

What's NESCOE?

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NEW ENGLAND'S FERC-APPROVED REGIONAL STATE COMMITTEE

MISSION: “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 [NESCOE.COM](https://www.nescOE.com)

NESCOE Governance

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- **Governed by a board of Managers, appointed by each of the New England Governors**
 - ✦ Issue by issue, Governors' Energy Policy Advisors, others, active as well
- **States' Voting Rights:** “Regardless of the number of individuals appointed by each Governor, each state will have one, undivided vote to cast in arriving at NESCOE determinations. NESCOE will make policy determinations with a majority vote (i.e. ...a numerical majority [of the states]) and a majority weighted to reflect relative electric load of each state within the region's overall load.”
- **So far, lots of agreement.** Higher math not needed to determine NESCOE positions



How We Work

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- Regular calls, occasional meetings, lots of interaction in between
- Work within New England's stakeholder process: PAC, PSPC, RC, PC, IPSAC, etc.
- President oversees day to day work
 - Tom Getz, Chairman, New Hampshire PUC
- Coordination with NECPUC & NEGC
 - grateful to Bill Nugent/rest of NECPUC & John Shea, NEGC
- Continuing efforts to build organization
 - Waine Whittier, George Smith - wealth of technical experience; Analysis Group

Substantive Focus

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System Planning & Expansion

For example:

- Regional System Plan
- Eastern Interconnection Planning

Resource Adequacy

For example:

- Regular ICR determinations
- ICR-related issues under discussion - tie benefits, etc...

People ask “Is working with diverse states is like herding cats?”

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Reality is, NESCOE Managers are engaged, mutually cooperative, motivated to speak with a voice. And besides...



“It ain’t an easy job, but when you bring a herd into town and you ain’t lost a one of ‘em, ain’t a feeling like it in the world.”

EDS Cowboys Cat Herding Superbowl Commercial

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Questions before moving on?

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New England Governors' Renewable Energy Blueprint

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**RENEWABLE RESOURCES IN & AROUND
NEW ENGLAND**

**INCLINATION & AUTHORITY
TO FACILITATE THEIR DEVELOPMENT
COOPERATIVELY**

The Blueprint's Path

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September 2008

NEGC Resolution

February 2009

Governors write to President Obama, Congress

March 2009

States request ISO-NE technical analysis

July 2009

ISO-NE issues draft Renewable Development Scenario Analysis (finalized in 2010)

September 2009

Governors Adopt Blueprint

Today

Work on coordinated procurement

Policy Choices Informed By Data

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- States asked ISO-NE to study “significant sources of renewable energy available to New England, the most effective means to integrate them into our power grid, and the estimated costs” and then developed study assumptions
- ISO-NE conducted RDSA
 - Looks out 20 years
 - 9 *conceptual* transmission scenarios
 - Focus on wind resources
 - Up to 12,000 MW of wind in New England
 - 7,500 MW onshore & 4,500 MW offshore
 - Incremental cases from 2,000 to 8,000 MW



Conclusion: Ample Resources, Choices

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- The New England region has a vast quantity of untapped renewable resources
- More than 10,000 MW (nameplate) on & off-shore wind power potential
- If developed at conservative levels, there are ample renewable resources to enable New England to meet renewable energy goals
- More aggressive development could enable New England to export renewable power to neighboring regions

Conclusions: Facilitation Opportunities

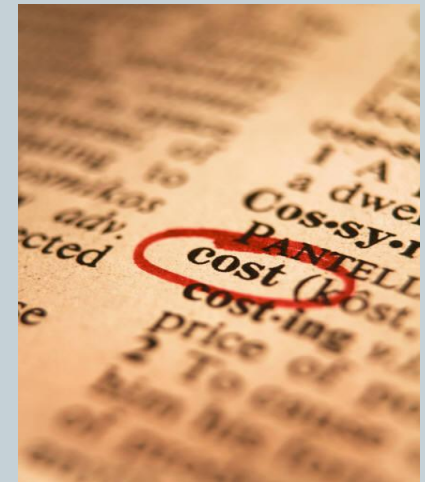
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New England states have:

- Cooperative experience, inclination & authority to do more
- Siting processes that enable coordination
- Long term contract approval mechanisms

Common contracting themes:

- Procurement via competitive processes
- Interest in securing **low cost, cost-effective or cost-stabilizing power**



Governors' Blueprint Resolution

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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.

Governors'/ECP Renewable Energy Resolution

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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 Smart People Do With Governors' Resolutions...

Form a Team

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Renewable Procurement Work Group

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- Assessing state procurement practices, processes
- Looking for coordination opportunities & ways around impediments
- Developing sample regional RFP
- Considering procurement levels
- Thinking about pricing structure alternatives, model terms & conditions, potential contract approval process options
- Making progress, not commitments
- Reporting to Governors Summer 2010

Eastern Wind Integration and Transmission Study (EWITS)

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PURPOSE AS STATED BY NREL: “TO EXAMINE THE OPERATIONAL IMPACT OF UP TO 20-30% ENERGY PENETRATION OF WIND ON THE POWER SYSTEM IN THE EASTERN INTERCONNECT OF THE UNITED STATES. THIS STUDY WAS SET UP TO ANSWER QUESTIONS THAT UTILITIES, REGIONAL TRANSMISSION OPERATORS, AND PLANNING ORGANIZATIONS HAD ABOUT WIND ENERGY AND TRANSMISSION DEVELOPMENT IN THE EAST.”

EWITS

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- Cousin of Joint Coordinated System Plan
- Existing system, load grown to 2024
- Picked “best” wind resources to meet 6%, 20%, 30% renewable goals
- Design conceptual cross-country transmission overlays to accommodate “economic” result
- Details at www.nrel.gov

EWITS Conclusions

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Lots of wind can be integrated.

If we build *lots* of transmission.

There will be benefits (*benefits?*) because *lots* of transmission would move *lots* of mid-west generation (*other than wind*) to the east coast.



NESCOE Concerns with EWITS

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- **Coal By Wire:** Transmission expansion isn't all about wind - likely to increase generation from mid-west traditional sources. *Wasn't this about carbon control?*
- **Canadian Resources:** EWITS assumed minimal expansion of Canadian resources. *What about vast low carbon Canadian power ..that's right here?*
- **Transmission Feasibility & Cost:** Material operations issues & associated costs understated; create RMR-type costs?; in-region transmission costs? *\$\$\$?*
- **No Regional Development Analysis:** *Policy discussions must be informed by data including comparisons – cost, technical feasibility, carbon impact – of meeting renewable goals through development of resources in and around New England (then competitive processes must identify which resources can serve consumers cost-effectively ...)*

Eastern Interconnection Planning

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PURPOSE ACCORDING TO DOE: TO FACILITATE THE DEVELOPMENT OR STRENGTHENING OF CAPABILITIES IN EACH OF THE THREE INTERCONNECTIONS IN THE LOWER 48 STATES OF THE UNITED STATES, TO PREPARE ANALYSES OF TRANSMISSION REQUIREMENTS UNDER A BROAD RANGE OF ALTERNATIVE FUTURES AND DEVELOP LONG-TERM INTERCONNECTION-WIDE TRANSMISSION EXPANSION PLANS

What's the Eastern Interconnect?

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- **Most of Eastern North America**, from the foot of the Rocky Mountains to the Atlantic seaboard
- **States:** 39, plus DC & New Orleans
 - Some restructured like most of New England. Some not
 - Some with competitive markets like New England. Some not
 - Some with renewables like New England & the Midwest. Some not
- **Planning Authorities:** At least 24 including PJM, ISO-NE, NYISO, MISO, SPP, companies, some smaller planning authorities
 - All with unique processes

How do 39 states & 24 planners organize?

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Eastern Interconnection Planning Collaborative (EIPC) <http://eipconline.com>

- Planning Authorities' Organization (\$16M from DOE)
- To perform Interconnection-Level Analysis & Planning
- The transmission engineering part
- Policy guidance from a *Stakeholder Steering Committee*, of which at least 1/3 must be states per the DOE; composition and size TBD

Eastern Interconnection States' Planning Council (EISPC, or "ICEPICK")

- State Organization (\$14M from DOE)
- To enable state coordination on analysis
- The policy part
- Two designees per state: 1 utility commissioner, 1 Governor's representative

THE WORK PLAN

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Start with a Credible Reference Case

- ✦ EIPC will start with regions' 10-year plans & roll them up into an interconnection-wide case
- ✦ EISPC will review, offer input
- ✦ **Problem Needing Resolution: Glitch from the start if rolled up 10 year plans are compared to 20 year build out scenarios**

Apples need Apples: 20 year build out scenarios need 20 year reference case

Then, Develop Macroeconomic Future Scenarios (8)

- ✦ Broad possibilities, see what warrants further study
- ✦ EISPC will select some, provide input on others

Then, Select Transmission Scenario Build-outs (3) including production cost modeling

- ✦ EISPC will have strong role in selecting
- ✦ EIPC Final Report to DOE June 2012

Eastern Interconnection Planning Valuable if...

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- Goals clear from the get go. *Is goal to build massive transmission or to sort out how to serve consumers with clean power cost-effectively?*
- Modeling set up to answer right questions
- Degree of states' guidance to EIPC is commensurate with the extent to which eastern interconnection planning will impact the public

It's about consumers



ISO-NE's Regional System Plan

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COMPREHENSIVE. LOTS OF USEFUL DATA.



Specifics about characteristics of solutions that could satisfy identified needs

The RSP shall...

- “specify the physical characteristics of the physical solutions that can meet the needs defined in the Needs Assessments and include information on market responses that can address them; and
- provide sufficient information to allow Market Participants to assess the quantity, general locations, operating characteristics and required availability criteria of the type of incremental supply or demand-side resources, or merchant transmission projects, that would satisfy the identified needs or that may serve to modify, offset or defer proposed regulated transmission upgrades.” (Attachment K)

Thanks.