

New England: Regional Energy Infrastructure Proposals

Sue Tierney, Analysis Group

Restructuring Roundtable April 11, 2014

BOSTON CHICAGO DALLAS DENVER LOS ANGELES MENLO PARK MONTREAL NEW YORK SAN FRANCISCO WASHINGTON



My comments today: The New England energy infrastructure initiative: Where are we as a region.....?

Caveat:

J. Raab invited me to join the panel, knowing of the recent report I prepared for NEPGA on the MA 'Clean Energy Resources' bill. I will mention that report later, but my comments focus more on the overall infrastructure initiative.

My remarks today reflect my own views.

I am not speaking 'on behalf of' NEPGA.



My high-level comments: Where are we as a region.....?

I went back to prior Roundtable remarks (at the 100th Anniversary Roundtable (2007))



New England's Electric Industry In an Era of Climate Change, Globalization, and Alzheimer's:

Where We Stand, Where We Need to Go....



Susan Tierney

"What Have We Accomplished With Electric Restructuring in New England Over the Past Decade, and What Do We Need To Accomplish Over the Next Decade?"

100th Massachusetts Restructuring Roundtable March 30, 2007 – Boston



What I liked then, I still like about New England:

Where We Stand: New England's strength in numbers

- We start restructuring with a key strength: regional ties
- It's an important legacy:
 - Key connections in physical energy systems.
 - Significant trade flows with NY and Eastern Canada
 - Shared resources, reserves, know-how
 - Shared environment and climatic systems (Acid Rain, NOx, CO₂)
 - Inter-governmental collaboration (e.g., NEGC, NECPUC, NEC/ECP)
 - Institutional cooperation (e.g., NESCAUM, ISO-NE)
- We've hung in there together for better or for worse
 - Ties may be fraying but they've served us well for years





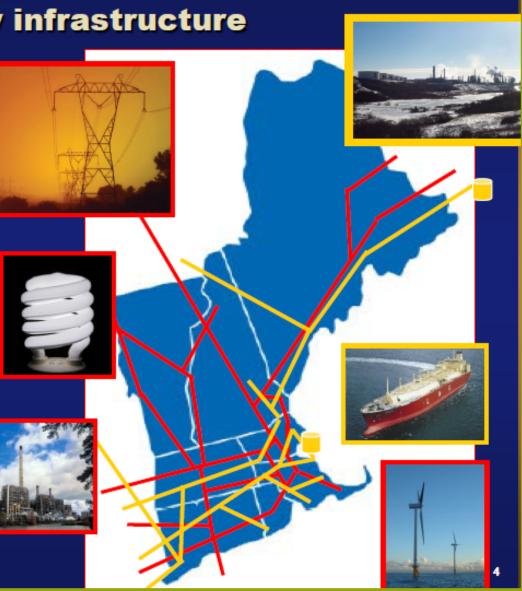
Where We Stand: Physical energy infrastructure

We import just about all of our energy supplies.

Our interconnections and integration make us stronger than if we were alone.

- * Electric
- * Natural Gas







What do today's policy makers want out of our energy system?

Here's what I hear these days:

- Affordable energy
- Reliable, diverse energy
- Greater energy productivity
- Clean energy
- Low GHG
- Small facility footprint
- Local jobs
- Reliance on markets
- Energy independence
- Keep the dollars in the region

On first blush:
The New England
Governors' Energy
Infrastructure Initiative
sounds like a creative
solution:

More pipes and wires to accomplish all of those outcomes, and developed through strong regional leadership and cooperation



What do I worry about for the region's electric system in its next chapter (with regard to infrastructure plans)?

The law of unintended consequences:

Good intentions:
Mixed results
(with some good and some bad)





The Energy Infrastructure Initiative: Potential negative consequences?

- Affordable energy?
 - Billions of dollars of investment underwritten by electric customers
 - Dollars would shift from energy commodity payments to energy delivery payments – with what total cost impact on consumers
- Reliance on markets?
 - Would pick winners, and ignore potential adverse impacts on the region's wholesale market and existing electric generating assets (including ones that have zero or low GHG)
- Clean energy with a small facility footprint and low GHG?
 - Would shift impacts of energy production to others outside of the region
- Energy independence and keeping dollars locally?
 - Would still lead to energy payments going out of the region

Many of these have been recognized by NESCOE – but not addressed yet in proposals



My report (for NEPGA) on the MA 'Clean Energy Resources' bill:

The bill would:

 Direct MA electric utilities to solicit (by the end of 2014) proposals for at least 18.9 million MWh per year from large hydro and renewable energy resources, for a 20-to-25 year contract period.

In spite of the very-good intentions (decarbonizing power supply), this bill would get there in a "too fast, too risky, too costly" way:

- This represents 1/6 of the NE demand for power (1/3 of MA's demand);
- MA electricity consumers would underwrite the contact (in a state with retail choice);
- Given the size of the procurement, this could crash prices in wholesale power markets – undermining the very sustainability of the wholesale market;
- The proposal assumes (incorrectly) that Canadian hydro will be cheap;
- The outcome (price suppression in ISO-NE energy markets; impacts in transmission-related costs) is not necessarily low cost in light of total cost of zero-carbon energy supply, taking into consideration delivery costs.



Let's continue to collaborate regionally.....

Working toward a framework for electricity supply that

- takes into account and directly addresses potential unintended consequences of the region's energy plans, and
- transitions to a regional energy system with
 - much-lower carbon energy resources
 - a market-friendly framework that stimulates and sustains private investment

September 3, 2013 Page 9



Susan Tierney, Ph.D.
Senior Advisor
Analysis Group
111 Huntington Ave, 10th Floor
Boston, MA 02199
617-425-8114
stierney@analysisgroup.com