



TESTIMONY OF ED KRAPELS
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Before

MASSACHUSETTS JOINT COMMITTEE OF
TELECOMMUNICATIONS, UTILITIES AND ENERGY
TUESDAY SEPTEMBER 29, 2015

Thank you Chairmen Downing and Golden and thank you to the Committee for this opportunity to share some thoughts about the opportunity the legislation being heard today could offer to the citizens and electric consumers of the Commonwealth.

My name is Ed Krapels and I am the President of Anbaric, a developer of large scale transmission projects as well as small, medium and large scale micro-grid projects. Anbaric has developed two large scale transmission projects in New York, projects that were completed on time and on budget that are currently saving New York ratepayers money.

I am here today to raise the issue of transmission and the critical role it will need to play if we are to reliably meet our clean energy goals and diversify our energy portfolio in an economic and efficient manner.

I am here today due to the legislation previously enacted in Massachusetts and similar legislation in all of the New England states that established clean energy goals and green house gas reduction goals for the region.

Before I was a transmission and micro-grid developer I was an energy market analyst. As such, when we examined the region's Green House Gas reduction goals, each of the Renewable Portfolio Standards, the retirement of fossil fuel generation facilities, and the growing dependence on Natural Gas, it became very clear that:

**A GRID BUILT FOR FOSSIL FUEL DOES NOT SERVE THE REGION'S
DESPERATE NEED FOR CLEAN ENERGY.**

So now in collaboration with National Grid, Anbaric is developing two transmission projects that will reliably deliver a combination of wind and hydro in an economical and efficient manner.

WHY DO WE NEED NEW, CLEAN ENERGY TRANSMISSION?

Simply put the New England Energy Market is in transition.

- 1) From an Economic Standpoint
 - a. Retiring fossil fuel and potentially nuclear generating facilities is diminishing the resource we have available to meet our power needs.
 - b. Massachusetts electric consumers need to replace that old resource...but
 - c. That dynamic is creating an over-dependence on natural gas, which exposes consumers to unstable and, indeed, volatile power prices.
 - d. So to create stability in consumer power bills we need new, clean energy resources... and a more diverse portfolio when we replace the old fossil fuel plants.
- 2) From a Policy Standpoint, the legislature has established
 - a. Green House Reduction Goals
 - b. Renewable Portfolio Standards
 - c. Both of which will not be met within the current system.
- 3) From a purely Engineering Standpoint our current Grid
 - a. Is already bursting at the seams.
 - b. The current grid was built by the utilities with ratepayers' monies to service fossil fuels.
 - c. It does not serve renewable energy.

HOW DO WE IMPROVE THE GRID TO ENABLE CLEAN ENERGY

How do address the challenges of the need for additional resource, need for additional clean resource and diversify our portfolio? It is not just new generation that is needed, it is **the means to bring that generation to market** that is missing.

- 4) New Transmission infrastructure is central to addressing our goals.
 - a. It is as important an investment as the generation itself.
 - b. New transmission will benefit consumers by:
 - i. Replace retiring facilities with clean energy
 - ii. Diversifying our supply
 - iii. Reducing Green House Gases
 - iv. Meeting RPS Goals
 - v. Delivering a Class 1 Resource, wind, in a reliable package firm by hydroelectric power.

- 5) The energy and economic analysis firm, ESAI, recently completed a study of one our projects -- the Vermont Green Line. It will deliver 400 MW of clean energy via an underwater and underground route from upstate New York into Vermont and the New England Grid. Both the study and a summary is being delivered to your offices. The numbers that matter are these. The Vermont Green Line will provide:
 - a. \$1.1 billion in “production cost savings” over the 40-year period our project will be bringing wind and hydro energy into New England
 - b. \$1.3 billion dollars in avoided ACP payments -- the penalty that legislation imposes on utilities if they don’t meet the RPS goals.
 - c. From this \$2.4 billion in benefits, we net out the expected \$1.5 billion in the capital cost of building the transmission line and the wind farms, which means \$900 million in total savings for your constituents.
 - d. The energy brought into New England by our Vermont Green Line also reduces our CO2 emissions by 1 million tons per year, and provides a welcome “portfolio” diversification for our power system: electricity from wind and hydro instead of from fossil fuels.

- 6) My message is simple
 - a. Any legislation should allow Massachusetts to participate in Regional Procurements. Share the cost regionally.
 - b. Pay attention to the Three State RFP soon to be issued. It will put real numbers to these projects as well as different approaches.
 - c. Establish a framework for “efficient transmission development.”



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- i. Minimally intrusive... buried
 - ii. Cost effective
 - iii. Address diversity, Green House Gas and RPS goals
 - iv. Utilizes hydroelectric power to work with regional wind development.

THE GOVERNOR AND MANY OF YOUR COLLEAGUES HAVE IDENTIFIED THE NEED FOR MORE RELIABLE CLEAN ENERGY RESOURCES AT THE BEST PRICE POSSIBLE. THE RESOURCE IS AVAILABLE. IT JUST NEEDS A MECHANISM TO GET TO MARKET.

THANK YOU AND I WILL BE HAPPY TO ANSWER ANY QUESTIONS.