MREI

MAINE RENEWABLE ENERGY INTERCONNECT

# A Generation and Transmission Solution for the Clean Energy RFP

www.mainerei.com

# Clean Energy RFP

Southern New England states issued a request for

**5,067 GWh of Qualified Clean Energy**

that meet the following criteria:

- Low cost
- Deliverable
- Experienced developers
- Route control
- Public support
- Economic benefits

# Partnership of CMP and Emera Maine

- Shared commitment to making this work for Maine
- A long history of working together
- A 35-year history of shared ownership in MEPCO transmission line from Wiscasset to New Brunswick
- Memorandum of Understanding in 2014 to develop projects together to benefit Maine
- History of experience and success with large projects

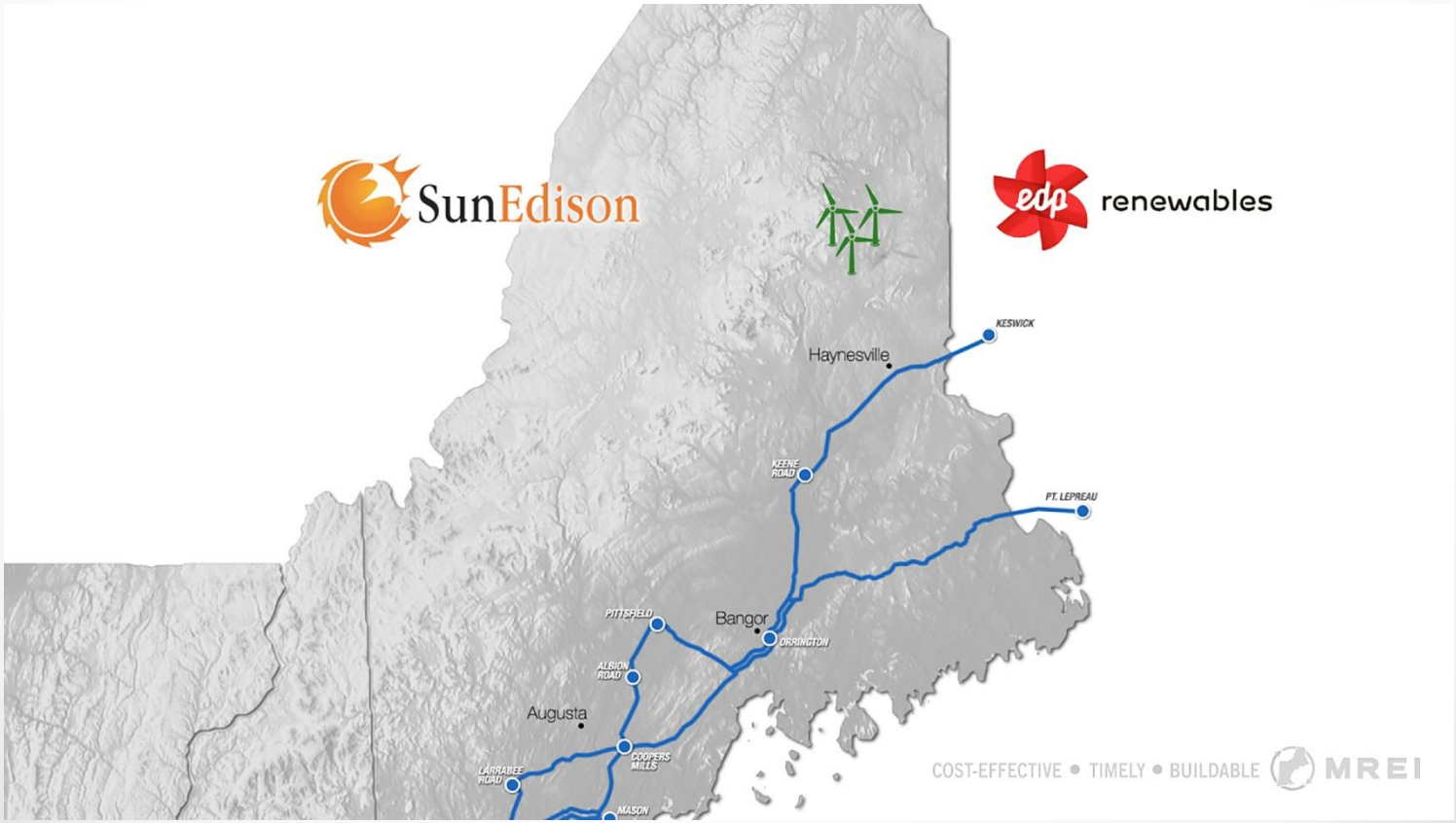
*A partnership of*

CENTRAL MAINE POWER

Emera Maine

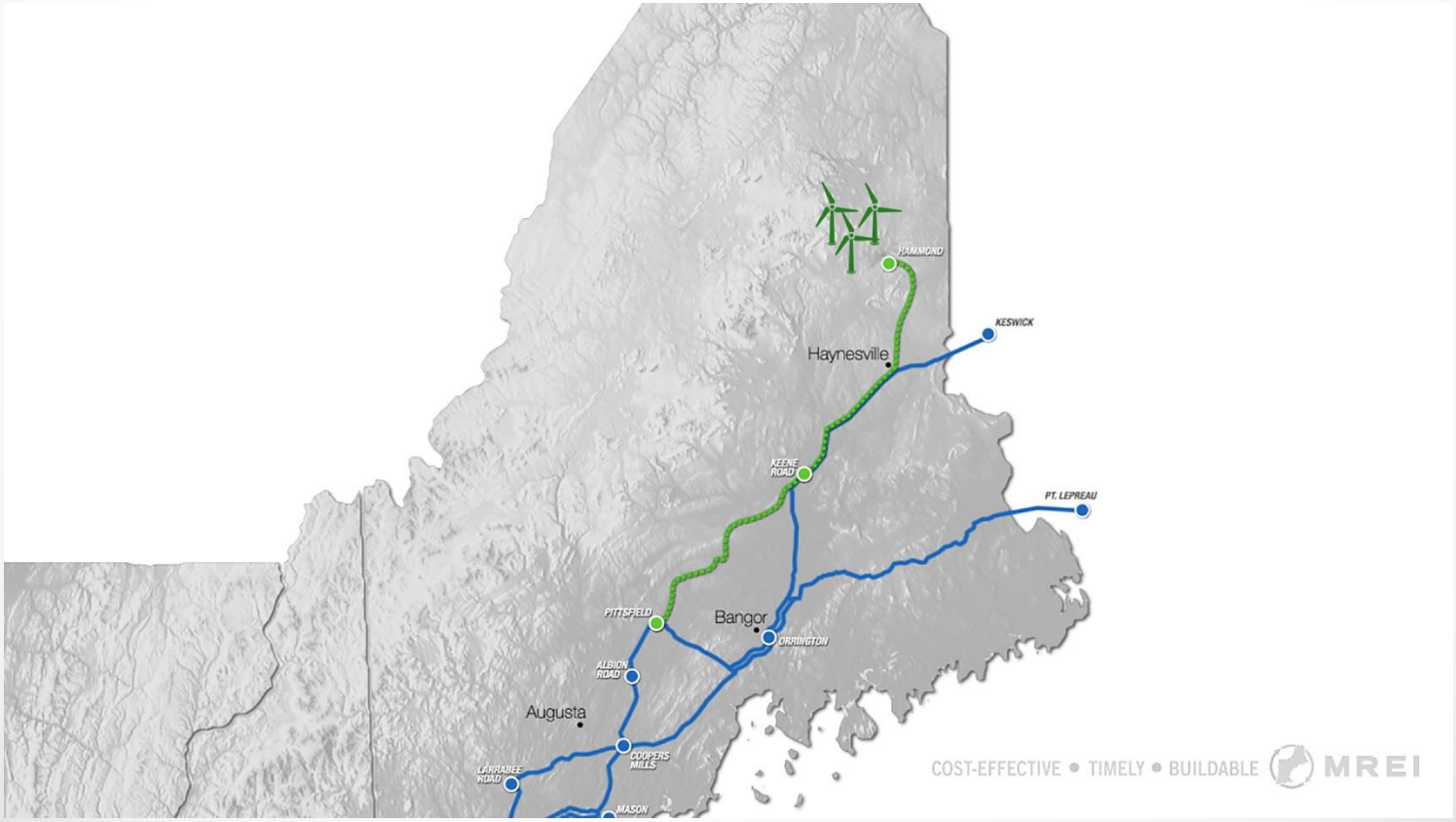
# Potential New Wind is Stranded

- Transmission bottlenecks at Orrington and Keene Road
- 345 kV line does not extend all the way to the wind resource



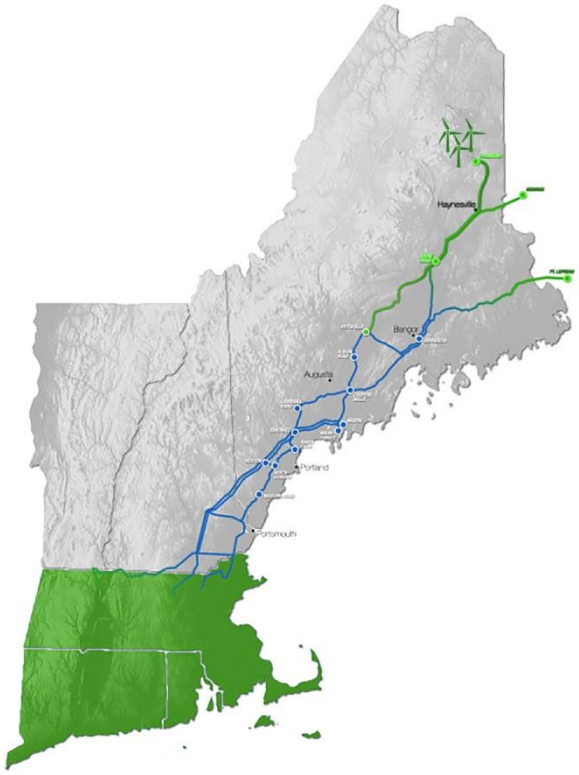
# Detailed Analysis to Find the Best Solution

- Looked at combinations in western, eastern and northern Maine
- The northern Maine solution can deliver the greatest amount of clean renewable power with the most cost-effective upgrades



# MREI Provides the Best Path for Generally Unconstrained Delivery

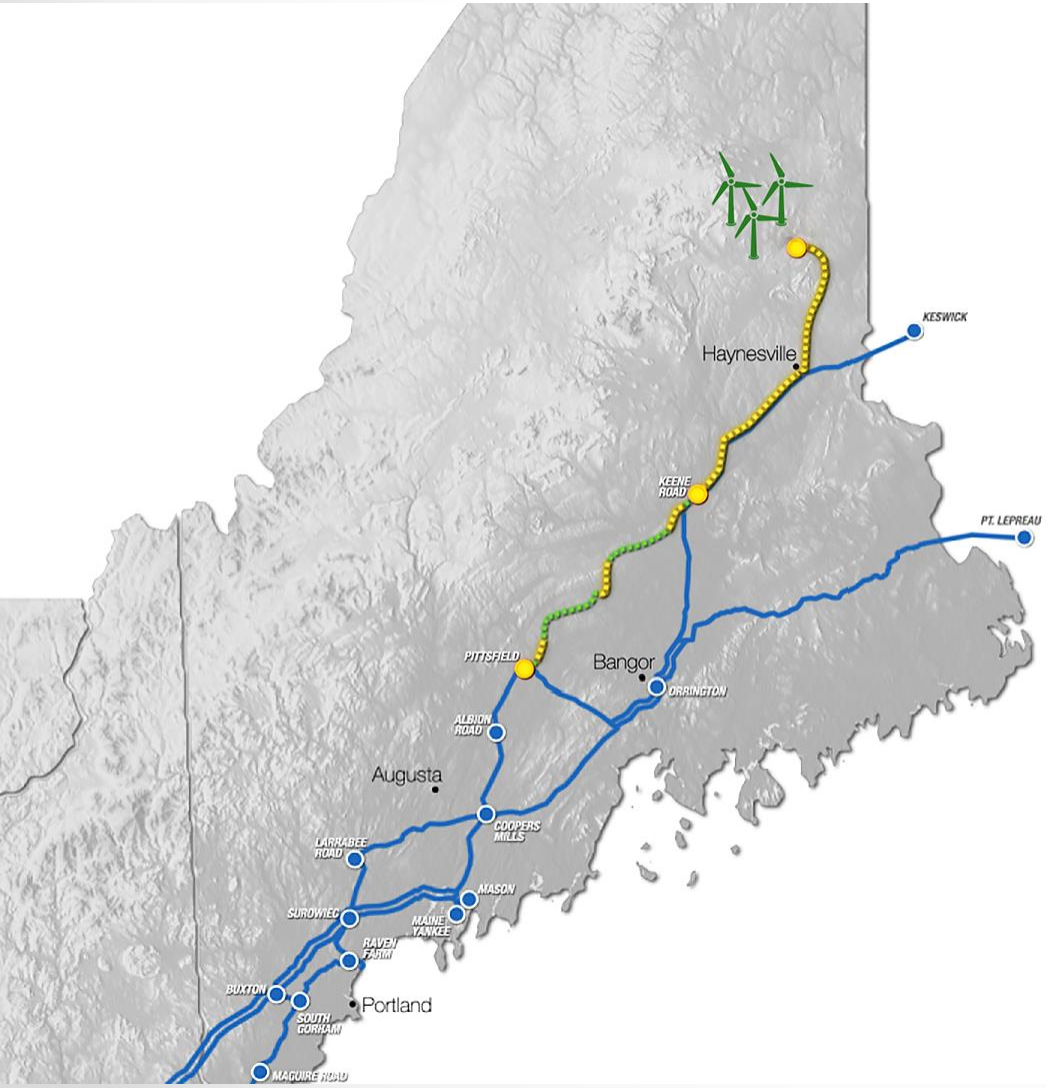
- Corridor close to wind resource and southerly to market exists today. MREI uses and expands it to improve delivery with significant system benefits




1200 MW

COST-EFFECTIVE • TIMELY • BUILDABLE MREI

# Transmission & Generation Combined

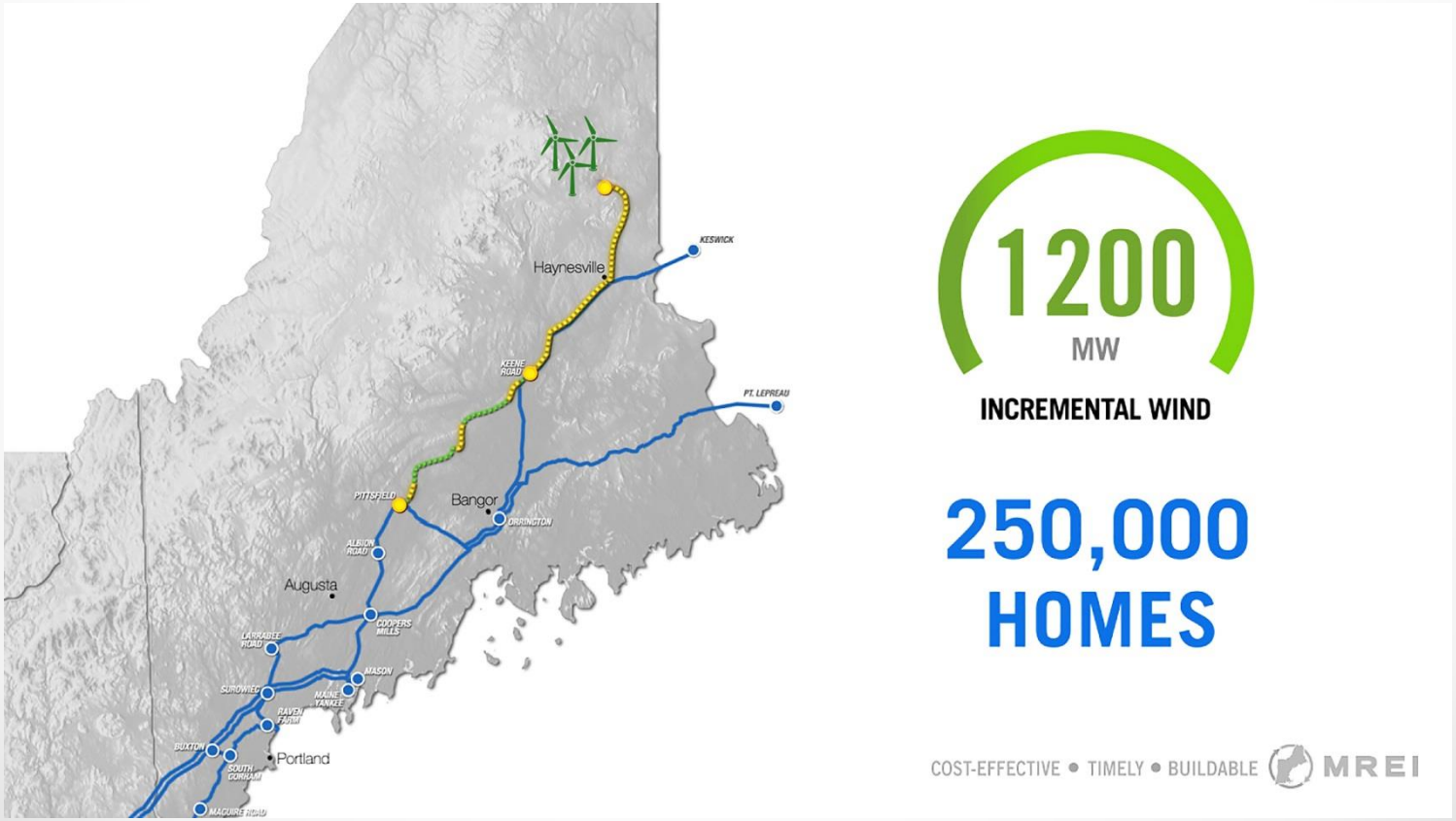



**OPTIMAL COMBINATION**
**OF CLEAN ENERGY RESOURCES**
**AND TRANSMISSION UPGRADES**

COST-EFFECTIVE • TIMELY • BUILDABLE MREI

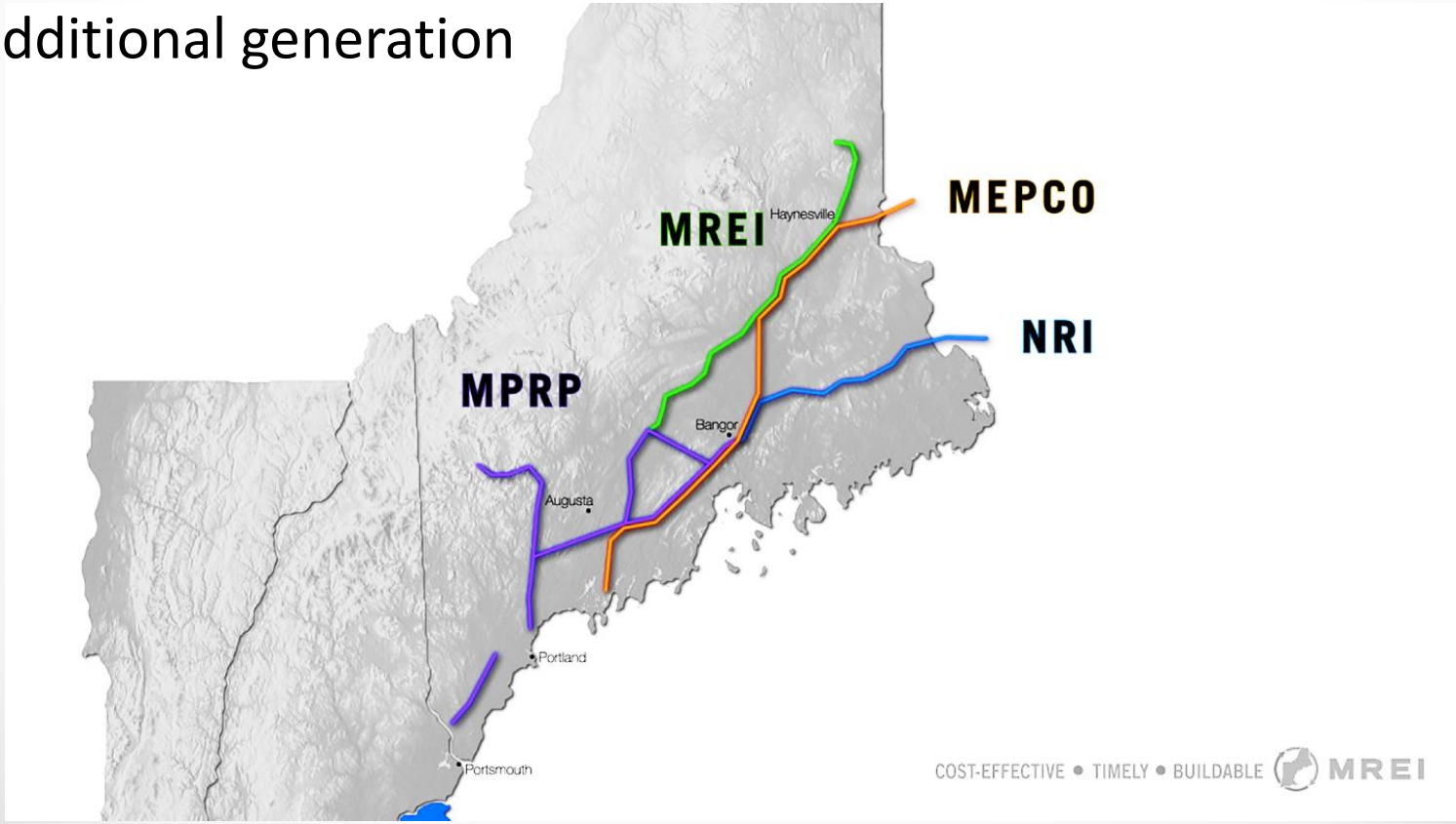
# Clean Energy Transmission for System Benefits

- Reliability and capacity benefits for the transmission system as a whole and enough NEW, or incremental clean energy to power 250,000 homes



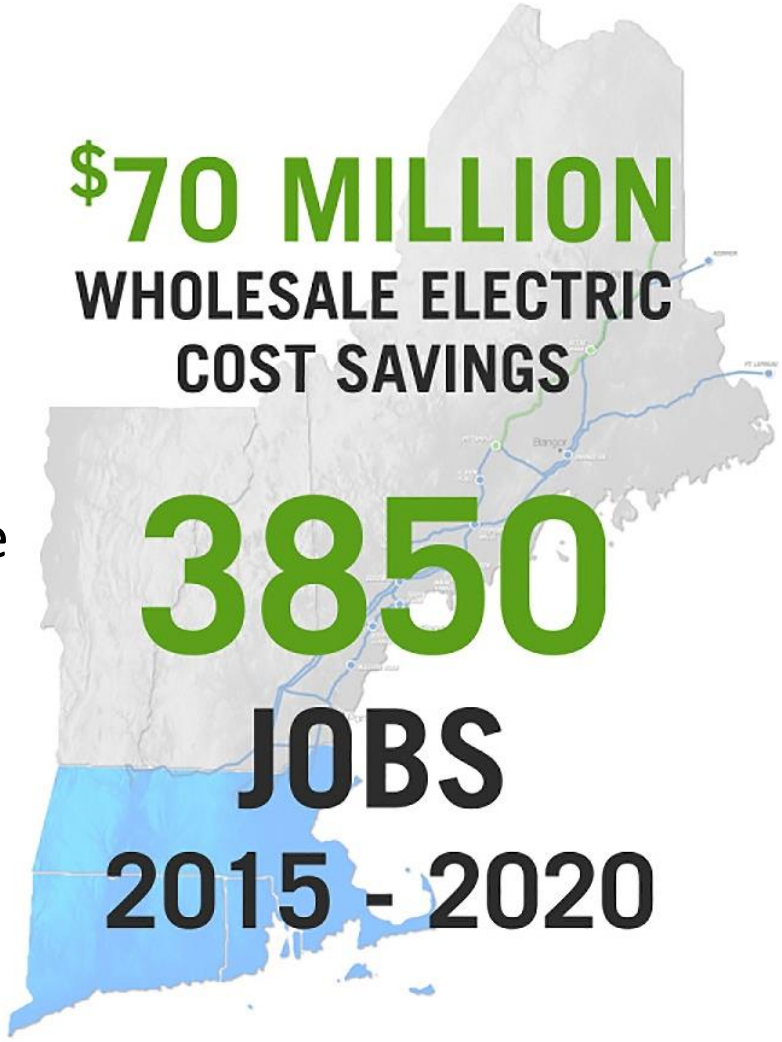
# Maine Bulk Transport System

- Leverages prior investment in bulk transport system
- Congestion resolved at key bottlenecks for generally unconstrained delivery and reduction in curtailments
- AC line is scalable and can cost-effectively enable new transmission for additional generation



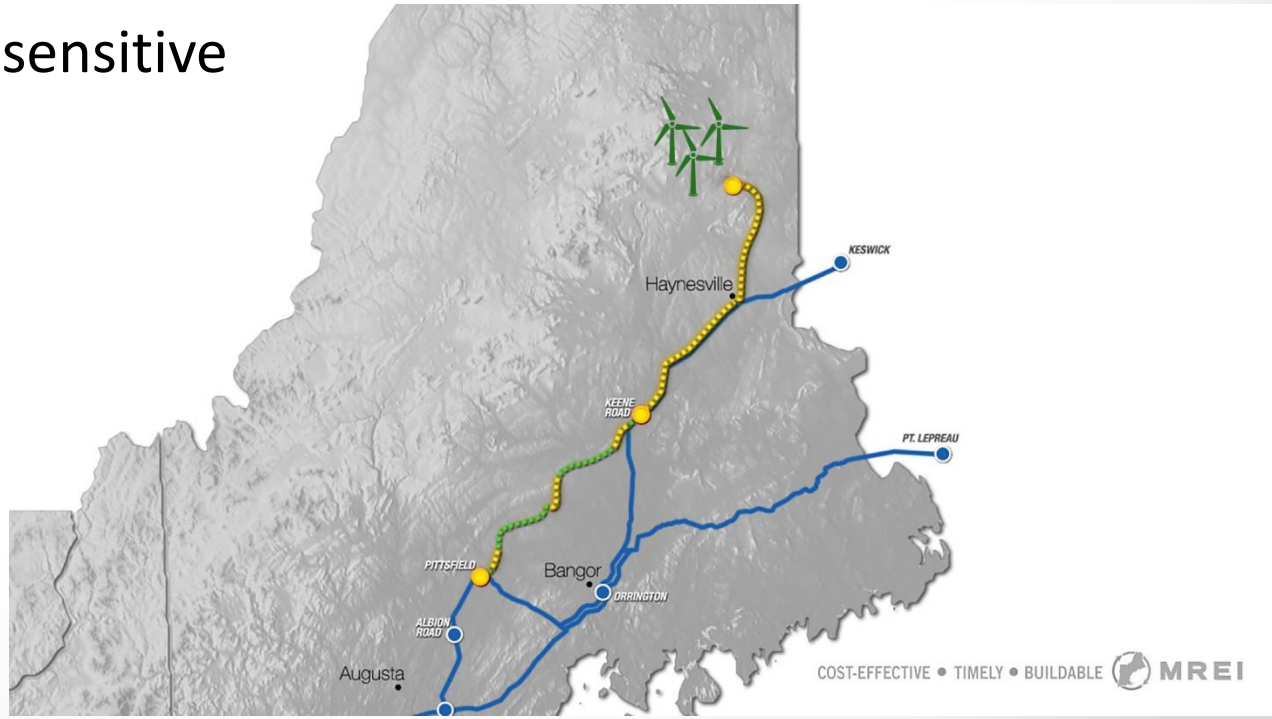
# Value for Maine & New England

- $250 million average annual increase in New England GDP
- Hundreds of millions of dollars in construction-related spending in Maine's economy
- Significant increase to local tax base in Maine
- Energy security and price stability region-wide

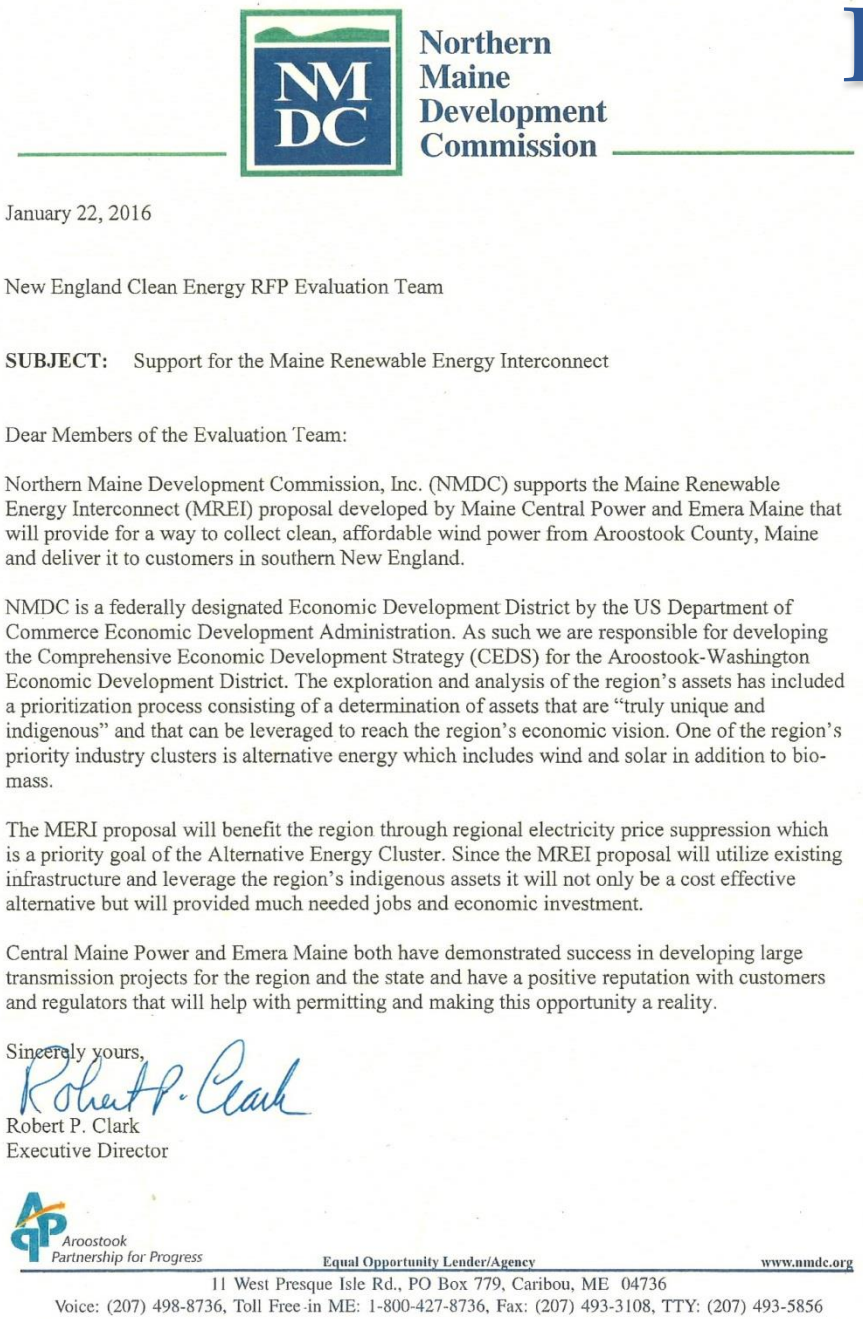


# A Cleaner Environment

- Use of existing corridors minimizes environmental impacts
- Approximately 3% reduction in New England's annual carbon emissions
- Clean energy replaces retiring fossil plants which is good for air quality
- Best practices avoids sensitive resources



# Public Acceptance



Northern Maine Development Commission

January 22, 2016

New England Clean Energy RFP Evaluation Team

**SUBJECT:** Support for the Maine Renewable Energy Interconnect

Dear Members of the Evaluation Team:

Northern Maine Development Commission, Inc. (NMDC) supports the Maine Renewable Energy Interconnect (MREI) proposal developed by Maine Central Power and Emera Maine that will provide for a way to collect clean, affordable wind power from Aroostook County, Maine and deliver it to customers in southern New England.

NMDC is a federally designated Economic Development District by the US Department of Commerce Economic Development Administration. As such we are responsible for developing the Comprehensive Economic Development Strategy (CEDS) for the Aroostook-Washington Economic Development District. The exploration and analysis of the region's assets has included a prioritization process consisting of a determination of assets that are "truly unique and indigenous" and that can be leveraged to reach the region's economic vision. One of the region's priority industry clusters is alternative energy which includes wind and solar in addition to bio-mass.

The MERI proposal will benefit the region through regional electricity price suppression which is a priority goal of the Alternative Energy Cluster. Since the MREI proposal will utilize existing infrastructure and leverage the region's indigenous assets it will not only be a cost effective alternative but will provided much needed jobs and economic investment.

Central Maine Power and Emera Maine both have demonstrated success in developing large transmission projects for the region and the state and have a positive reputation with customers and regulators that will help with permitting and making this opportunity a reality.

Sincerely yours,

Robert P. Clark

Robert P. Clark
Executive Director

Aroostook Partnership for Progress

Equal Opportunity Lender/Agency www.nmdc.org

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- Using best practice lessons learned from recent projects, including MPRP and NRI
- Local outreach underway from Pittsfield to Chester
- Approach to landowners is respectful; look for a mutually agreeable route
- Favorable reception from local officials

# High Level Milestone Schedule

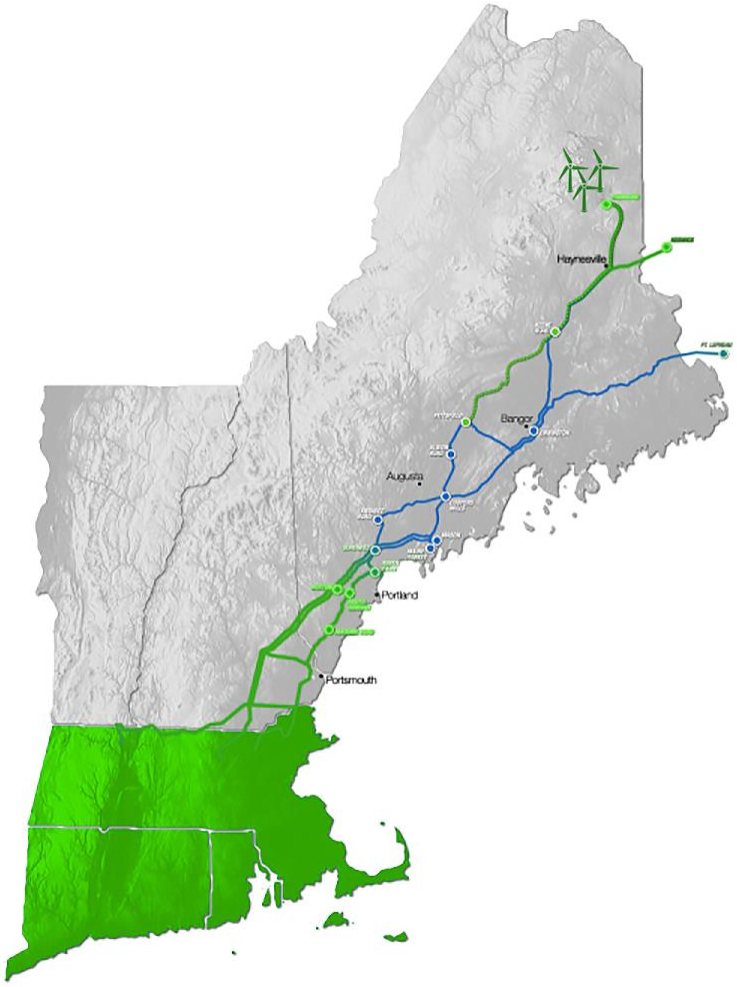
# Competing RFPs

- 6 solar submissions
- 5 wind submissions without transmission
- 1 hydro project (MD)
- 1 fuel cell project (CT)
- 6 transmission proposals with associated generation

# MREI Value Proposition

- Highly economical and permittable new clean energy resources
- Above-ground AC line is cost-effective and scalable for additional generation
- Significant amount of existing right-of-way minimizes costs and impacts
- Southern New England benefits from prior investment in bulk power system
- Improved reliability and transfer capacity for Maine paid for by southern New England
- Direct benefits and savings for the region; jobs for Maine

# Maine Renewable Energy Interconnect

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