



ISO-NE CONSUMER LIAISON GROUP MEETING | 09.15.16

Energy Infrastructure Projects Progressing in Rhode Island: Challenges & Consumer Impacts Region Wide

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Spectra Energy's Facilities in New England



Challenges for Building Energy Infrastructure



LDC's have Executed Contracts for New Pipeline Capacity



The AIM & Atlantic Bridge Projects are designed to provide access to abundant regional natural gas supplies to growing demand markets in New England & Atlantic Canada

AIM

- Capacity: ~340 MMcf/d
- FERC Application Submittal: February 2014
- Received FERC Certificate: March 2015
- Target In-Service: 2H16

Atlantic Bridge

- Capacity: ~135 MMcf/d
- FERC Application Submittal: Oct 2015
- FERC Certificate Target: 2H16
- Target In-Service: 2H17

Access Northeast A Regional Solution to Meet the Region's Electric Generation Needs



Project Scope:

- ~\$3 billion (100%); 900 MMcf/d
- Joint development with Eversource and National Grid

Project Need:

- New England electric power market continues to become more gas dependent
- Natural gas generation has increased from 15% to 50% market share since 2000
- Likely to rise further with Brayton Point, Pilgrim retirements, new gas-fired facilities coming on line
- Additional natural gas infrastructure is needed to serve growing gas generation
- Access Northeast is best positioned to meet growing natural gas demand needs in New England

A solution for New England must be found

Natural Gas Utilized for Electric Generation: Electric Reliability Requires Firm to Wellhead



In the Winter New England Shifts to Coal & Oil

Winter 2014-2015 Fossil Fuel Mix (MWh)



Source: ISO-NE, Gordan van Welie presentation, November 2015

Regulatory Status

Federal	Docket	Status
FERC	RP16-618	FERC approved portion of waiver
	PF16-1	In Pre-Filing
State	Submit PA to PUC	Status
Massachusetts	January 2016	Application withdrawn as result of MA Supreme Judicial Court decision
New Hampshire	February 2016	Phase I (legal review) underway
Rhode Island	February 2016	State proceeding progressing
Maine	May 2016	Access Northeast project selected
Connecticut	May 2016	Awaiting RFP decision

Next Steps for Access Northeast

- The Massachusetts Supreme Judicial created a contracting hole for the regional solution.
- We are evaluating alternative commercial structures with goal of preserving the regional support for the project.
- New England is at a pivotal moment in determining its energy future and that the "do nothing" scenario is untenable.
- Without a regional targeted expansion of natural gas pipeline capacity, New England energy consumers will inevitably bear the brunt of ever-increasing energy prices and ever-diminishing supply reliability.





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Appendix

Price Relief for Electric Customers

Increased natural gas capacity will provide substantial savings for residential and commercial electric consumers – especially in extreme winters

\$2.5B

Potential savings during extreme winters like 2013/14

\$1.4B Potential savings during normal weather conditions

Environmental Benefits – Meaningful Emission Reductions

Access Northeast can reduce regional emissions by displacing coal & oil-fired power generation with cleaner natural gas generation

3.4_{MM tons of} CO₂ emissions avoided/year

emissions could be reduced CO₂ by 25% SO₂ by 90%

in a single winter



...this is like removing 650,000 cars

from the road every year!

Natural Gas Growth – Power Generation, Consumption, Fuel of Choice

1995 – 2015 Natural gas consumption has increased from 1.6 Bcf/d to 2.6 Bcf/d



New England Primary Fuel for Residential Heating

New England Natural Gas Power Generation Growth (Bcf/d)



Reliability: Gas Not Available When it is Needed Most



Natural Gas and Wholesale Electricity Prices Are Linked

"In recent winters, the region has experienced price spikes driven by strong demand from the electricity and heating sectors for limited supplies of low-cost natural gas" - **2016 ISO-NE REO**

in Real-Time Energy Market
Natural Gas Price
at Algonguin City Gate

Wholesale Electricity Prices



Contracts to Support Infrastructure are Essential

- Customers for our AIM and Atlantic Bridge projects are local gas distribution companies, providing natural gas to homes and businesses
- Power generation is also an critical part of New England's energy story
- Pipeline infrastructure in New England has not kept up with demand from power generators.
- Gas-fired power plants must be directly connected to a gas pipeline



New England Fuel Mix for Power Generation

As older, less efficient power plants in New England retire, they are being replaced with natural gas – increasing the need for gas infrastructure