Please Come to Boston:

New England's Ongoing Gas-Supply Dilemma

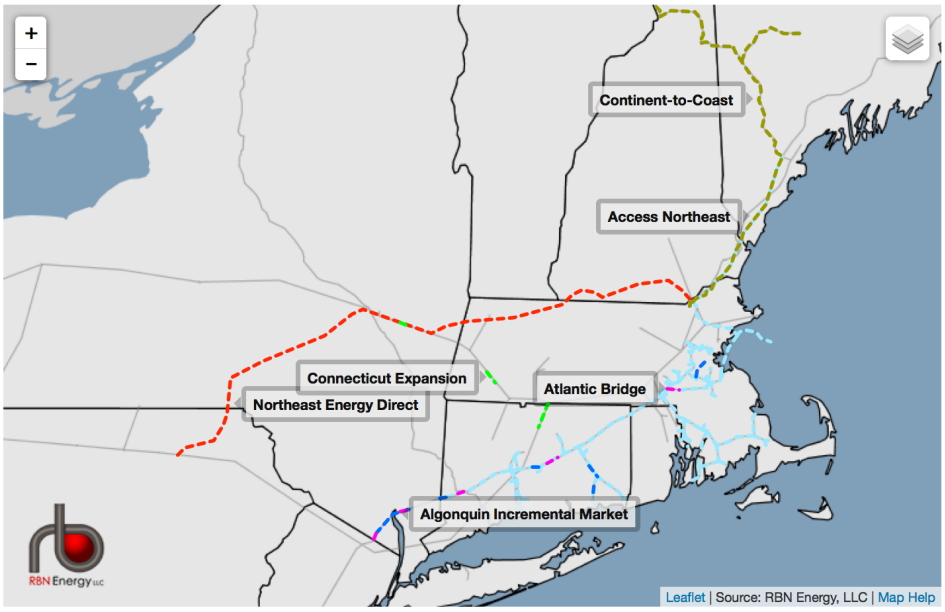
- **Natural gas demand in New England has been rising, but the region's existing gas pipeline infrastructure continues to fall short, especially during winter peaks.**
- **The region is close to the booming Marcellus center of gas production but appears unable to take full advantage of those supplies.**
- **Pipeline constraints are causing major price spikes--for natural gas and for electricity-and encouraging a sense of urgency.**
- **Efforts to add gas pipeline capacity are hindered by tough regulations, regional and local activism, electric-market rules, and who-pays-for-it questions.**
- **Solutions to break through pipeline-development logjams are in the works, but new pipeline capacity won't be the only answer.**

New England faces unique energy-supply challenges. The six-state region, with a population of about 15 million, is only hours away from the heart of the dry Marcellus natural gas production area in northeastern Pennsylvania, and generally views gas as an important part of its energy future. However, the existing gas pipeline infrastructure into and through New England lacks the capacity the region needs to ensure adequate gas supplies—especially during high-demand winter cold snaps. Worse yet, its competitive electricity market, whose power-generation participants account for a significant portion of overall gas demand, has failed to provide incentives for generators to lock in long-term, firm gas pipeline capacity. As a result, efforts by midstream companies to expand existing pipelines and build new, "greenfield" pipelines to deliver more gas to New England have been stymied by a lack of firm commitments from shippers. Until recently the only entities willing to contract for firm pipeline capacity have been local gas distribution companies (LDCs) that can recover the costs associated with pipeline-capacity commitments through retail customer bills.

New England's electric grid now depends on natural gas-fired power plants for about half of the region's power needs (up from only 15% in 2000) but has turned to short term solutions to cope with wintertime gas-supply shortfalls (and resulting spikes in gas prices). These workarounds include stockpiling fuel oil at dual-fuel generation units and shifting to oil-firing during peak winter demand periods. Also, the grid turns to New England's dwindling number of coal units to help fill wintertime electricity-supply gaps. The region's governors, ISO New England (the electric grid's operator), midstream companies and others have been working to develop long-term solutions to the energy-supply challenges, but while they have been making some progress, a comprehensive solution has so far proved elusive.

In this Drill Down report, we examine New England's energy challenges in depth, beginning with the rapidly increasing role natural gas is playing in regional power generation, industrial use, and commercial and residential space heating. The report also discusses the effects that New England's seasonal gas-delivery shortcomings have had on gas and electric prices; the quandary posed by the electric sector's lack of incentives for investing in firm pipeline capacity; the ongoing efforts by governors, ISO New England, midstream companies, LDCs and electric distribution companies (EDCs) to encourage new pipeline development; and the roles that oil and imported liquefied natural gas (LNG) have played—and may continue to play--in helping to meet New England's energy needs. In addition, the report describes in detail proposed enhancements to the region's gas pipeline infrastructure. The report concludes with a look ahead—a summary of how New England's energy sector is likely to evolve over the next five to 10 years.

Included with this Drill Down report are interactive graphics using RBN's new *Pipeline GIS* mapping tool, designed to help you better understand how the pipelines into and through New England relate to each other. *Pipeline GIS* is a web-based system that integrates regional energy infrastructure into one or more "GIS windows", and allows the user to zoom, scroll and select/deselect different objects for viewing. Pipeline projects referenced in this report can be viewed in Pipeline GIS by clicking on the image below.



Select New England Pipeline Projects; Source: RBN Energy
(click on map to view in Pipeline GIS)

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