

A Different Kind of  
**ENERGY COMPANY**



# Northeast Energy Direct Project

**Townsend Board of Selectmen**

Townsend, MA

Wednesday, June 25, 2014

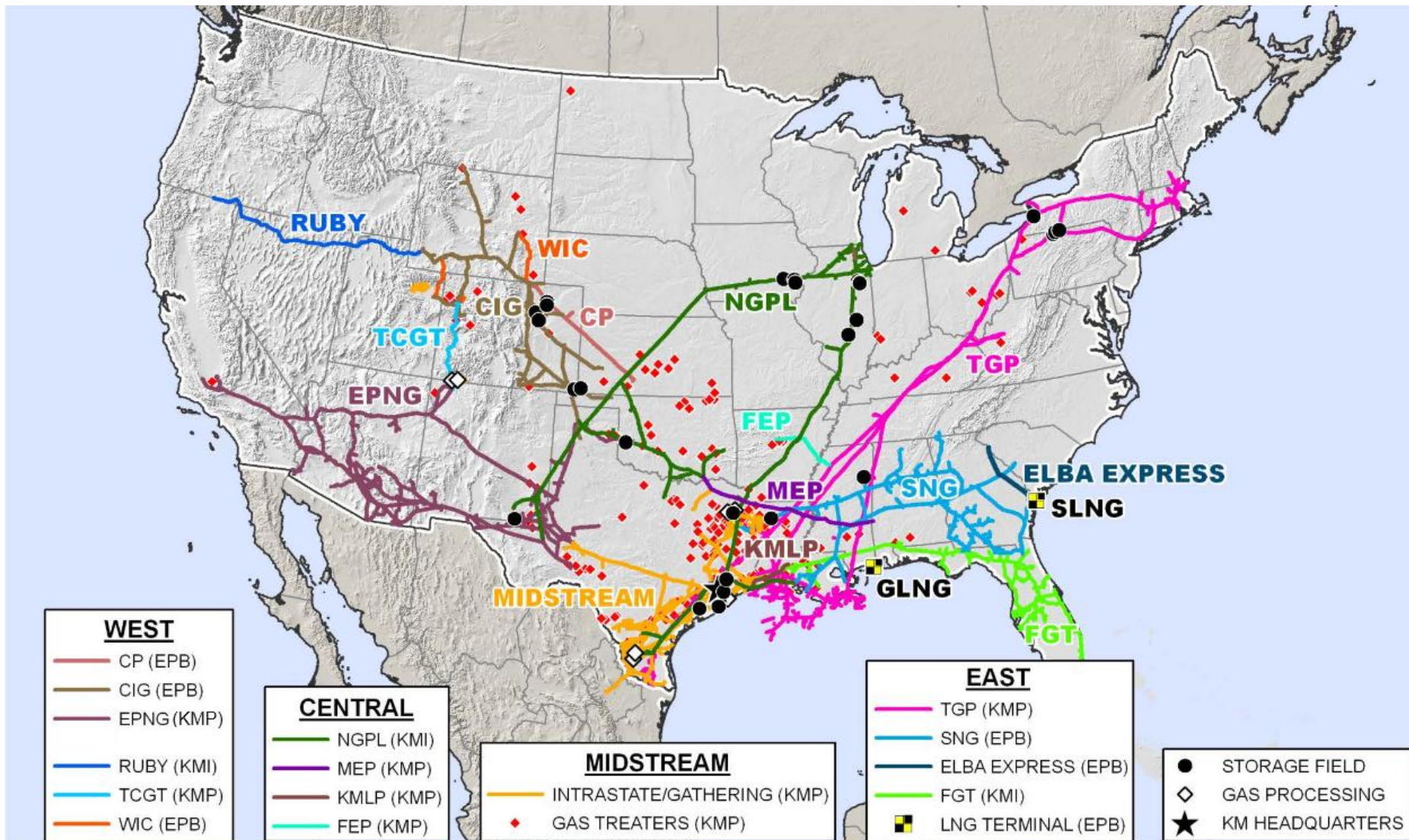


# About Kinder Morgan



- Kinder Morgan is one of the largest, most experienced energy companies in North America. We own an interest in or operate approximately 80,000 miles of pipelines and 180 terminals.
- Kinder Morgan employs approximately 11,500 people throughout the United States and Canada.
- We are committed to operating our assets in a safe, ethical and transparent manner.
- We ensure public safety and safe pipeline operations through employee training, regular testing, right-of-way aerial and foot patrols and adherence to our comprehensive Integrity Management plan and procedures.
- Kinder Morgan does not have a Political Action Committee (PAC), or make any political contributions.

# Kinder Morgan Natural Gas Pipelines





# U.S. Shale Plays

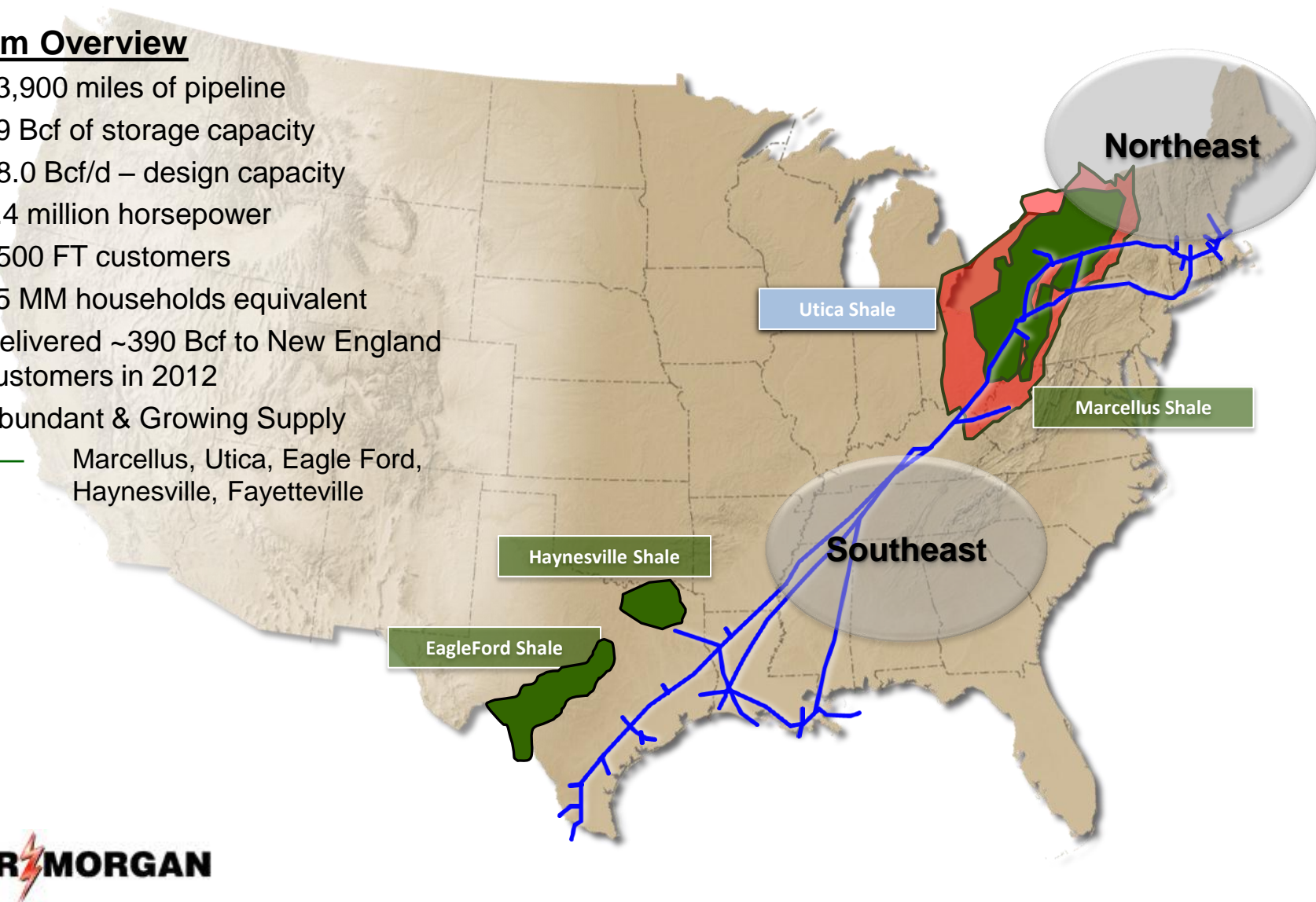




# Tennessee Gas Pipeline

## System Overview

- 13,900 miles of pipeline
- 79 Bcf of storage capacity
- ~8.0 Bcf/d – design capacity
- 1.4 million horsepower
- >500 FT customers
- 35 MM households equivalent
- Delivered ~390 Bcf to New England customers in 2012
- Abundant & Growing Supply
  - Marcellus, Utica, Eagle Ford, Haynesville, Fayetteville



# Customers in New England

## New England LDC Customers

- EnergyNorth Natural Gas (NH)
- Northern Utilities (ME)
- Fitchburg Gas & Electric Light Co. (MA)
- Colonial Gas Co. (MA)
- Essex County Gas Co. (MA)
- Boston Gas Co. (MA)
- NSTAR Gas Co. (MA)
- Bay State Gas Co. aka Columbia Gas of MA (MA)
- Blackstone Gas Co. (MA, Municipal)
- Narragansett Electric Co. d/b/a National Grid (RI)
- Holyoke Gas & Electric (MA, Municipal)
- Westfield Gas & Electric Dept. (MA, Municipal)
- Berkshire Gas Co. (MA)
- Connecticut Natural Gas Co. (CT)
- Southern Connecticut Gas Co. (CT)
- Yankee Gas Services Co. (CT)

## New England Power Generators

- Granite Ridge LLC
- Entergy RISE
- Blackstone GDFSUEZ

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# MASSACHUSETTS

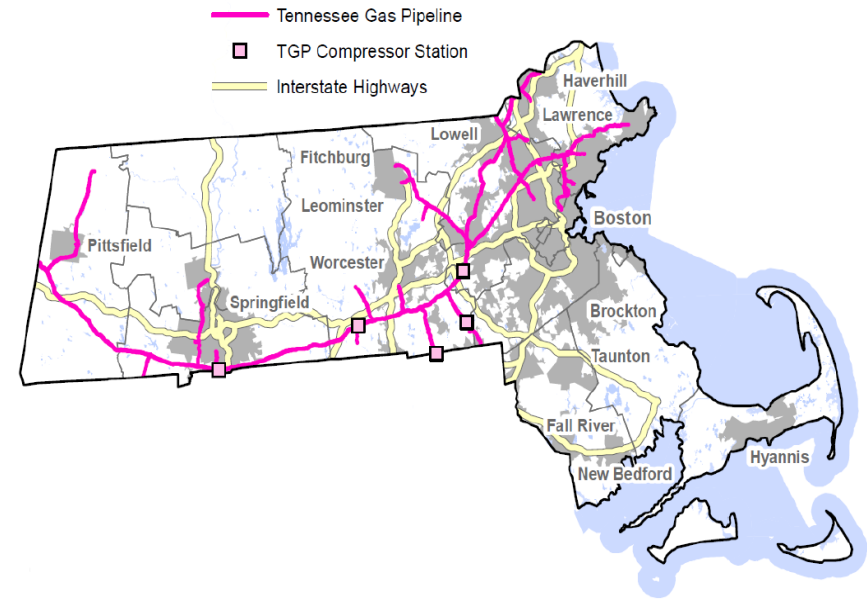
**KINDER**  **MORGAN**



# KINDER MORGAN MASSACHUSETTS ASSETS

## In Massachusetts,

- Kinder Morgan employed **46 people** in 2013
- Kinder Morgan's total 2013 payroll was **\$3.6 million**
- In 2013, Kinder Morgan paid approximately **\$5.85 million** to state and local taxing bodies.
  - In 2013, Kinder Morgan paid approx. **\$1.4 million** in taxes to Middlesex County.
- Kinder Morgan operates approximately **600 miles** of pipeline
  - Kinder Morgan operates approximately **half** of Massachusetts **1,125 miles** of natural gas transmission pipelines.



Kinder Morgan operates assets in eight counties throughout Massachusetts: Berkshire, Essex, Hampden, Hampshire, Middlesex, Norfolk, Suffolk and Worcester



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# The Need for the Northeast Energy Direct Project

**KINDER  MORGAN**



# Northeast Energy Crisis

## Unprecedented gas capacity constraints on existing pipelines

(Source: ISO-NE, EIA.gov)

## Highest and most volatile gas commodity costs in the nation

(Source: ISO-NE, EIA.gov)

### BloombergBusinessweek Global Economics

Energy

#### Northeast's Record Natural Gas Prices Due to Pipeline Dearth

By Matthew Phillips | February 06, 2014

### BOSTON BUSINESS JOURNAL

#### Mass. faces gas shortage despite national surge

Despite abundant new sources of natural gas, New England faces shortages — and may pay the price

### CONCORD MONITOR

#### New England seeks to expand natural gas delivery network

By STEPHEN SINGER  
Associated Press  
Thursday, January 23, 2014  
(Published in print: Friday, January 24, 2014)

### Portland Press Herald

MONDAY, MARCH 31, 2014

March 3

#### Study: Adding natural gas capacity could cut Maine electric bills by \$120 million annually

Some environmental groups, however, have questioned whether the region is best served by becoming more dependent on the fuel.

By Tux Turkel [turkel@pressherald.com](mailto:turkel@pressherald.com)  
Staff Writer

### THE RECORDER

#### Gas line limits boost New England electricity prices

Associated Press  
Tuesday, March 18, 2014  
(Published in print: Wednesday, March 19, 2014)

### lowellsun.com Lowell, Massachusetts

#### ISO: Gas-pipeline shortage boosts electricity prices

The Lowell Sun  
UPDATED: 03/18/2014 06:54 AM EDT

0 COMMENT

HOLYOKE (AP) -- A lack of pipelines into New England is making natural gas costlier, pushing up wholesale electricity prices in the region by 55 percent last year, the region's electric grid operator said Tuesday.

### wcvb.com

#### Insufficient pipelines boosting natural gas price

ISO-New England says price up to \$56.06 per megawatt hour

Published: 2:58 PM EDT Mar 18, 2014

# Northeast Energy Crisis

United States Senate  
WASHINGTON, DC 20510

December 20, 2013

The Honorable Ernest Moniz  
Secretary  
U.S. Department of Energy  
1000 Independence Ave SW  
Washington, DC 20585

Dear Secretary Moniz:

We write to express our concern about the natural gas and energy market challenges facing the New England region and the effect that high energy prices are having on consumers and businesses in our states. We were very encouraged to learn that the first Interagency Quadrennial Energy Review will focus on energy infrastructure. Given that New England faces the some of the highest natural gas prices in the nation, we urge you to consider the unique regional challenges facing New England as the Department of Energy undertakes this review.

New England states currently rely heavily on natural gas for electricity production and residential heating, with natural-gas-fired plants producing 52 percent of the power generated in the New England region in 2012. The predominance of natural gas for power generation has resulted in our region's electric supply being one of the cleanest in the nation, but New England's energy infrastructure has not kept pace and the region's electric and natural gas systems have become increasingly interdependent. According to the Federal Energy Regulatory Commission (FERC), the New England market is particularly at risk for service disruption due to limited pipeline capacity into the region. This not only threatens reliability but also results in more volatile natural gas and power prices during periods of high demand. The Governors of our states – similarly recognizing these challenges – recently announced a commitment to advancing a regional energy infrastructure initiative that would support cooperative investments in energy efficiency, new and existing renewable generation, natural gas pipelines, and electric transmission.

While New England continues to make strides in increasing the use of renewable sources of energy, our region's success in improving air quality, reducing pollution, and transitioning to a clean energy economy relies on the availability and reliability of affordable natural gas resources. Despite the abundance of domestic natural gas resources and low natural gas prices elsewhere in the United States, the high demand for natural gas to meet heating and electricity needs, coupled with significantly constrained pipeline capacity into the region, has driven up natural gas and wholesale electricity prices and threatened reliability in New England. According to the U.S. Energy Information Administration (EIA), New England often sees natural gas spot prices higher than the national average. This past winter, the average price at the Algonquin Citygate trading point (a widely used index for New England natural gas) was over \$6/MMBtu. In contrast, the natural gas spot price at Henry Hub (the price point for natural gas futures traded on the NYMEX) was \$3.43/MMBtu – nearly half the price.

  
Jack Reed  
United States Senator

  
Susan Collins  
United States Senator

  
Sheldon Whitehouse  
United States Senator

  
Angus King, Jr.  
United States Senator

  
Richard Blumenthal  
United States Senator

  
Chris Murphy  
United States Senator

  
Bruce Shusterman  
United States Senator

  
Kelly Ayotte  
United States Senator

  
Patrick J. Leahy  
United States Senator

  
Bernard Sanders  
United States Senator

  
Edward J. Markey  
United States Senator

  
Elizabeth Warren  
United States Senator

## LETTER FROM THE NEW ENGLAND U.S. SENATE DELEGATION TO DEPARTMENT OF ENERGY SECRETARY MONIZ – December 13, 2013

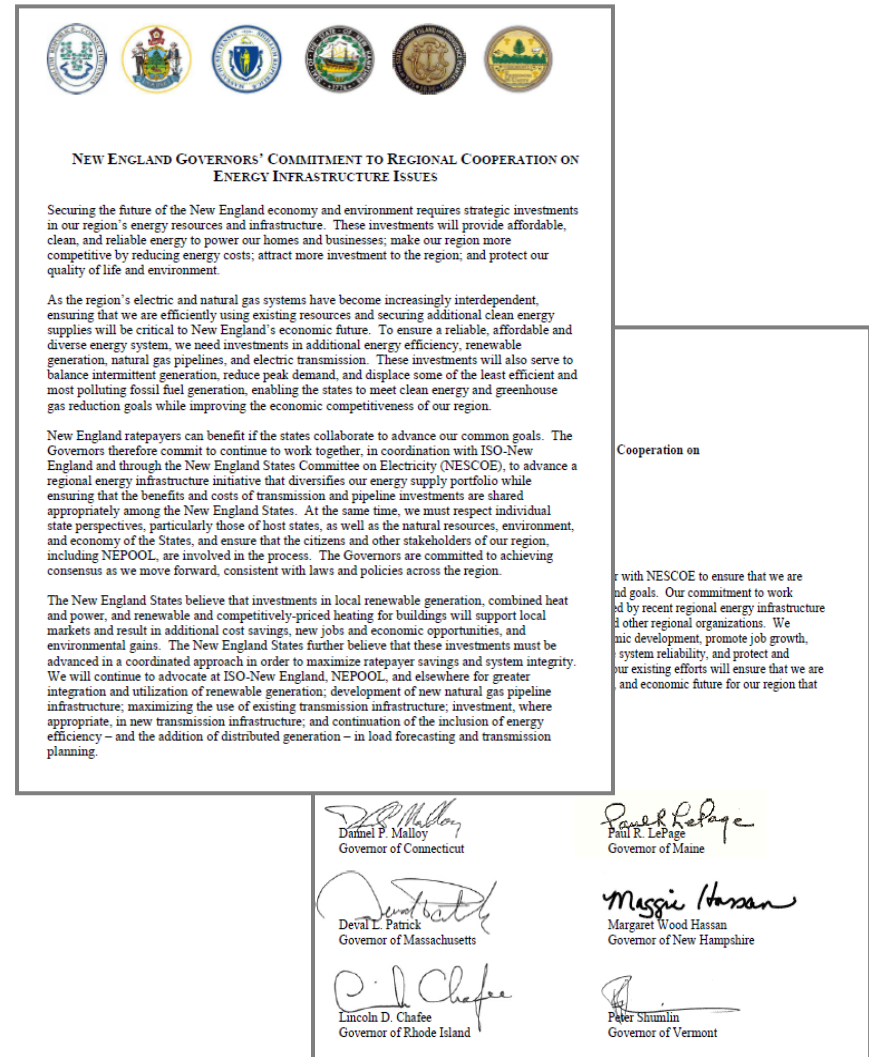
“According to the Federal Energy Regulatory Commission (FERC), the New England market is particularly at risk for service disruption due to limited pipeline capacity into the region. This not only threatens reliability but also results in more volatile natural gas and power prices during periods of high demand.”

“Energy infrastructure in the region is simply inadequate to meet demand and has been a key factor in the energy price volatility.”



# Governors' Statement on Northeast Energy Infrastructure

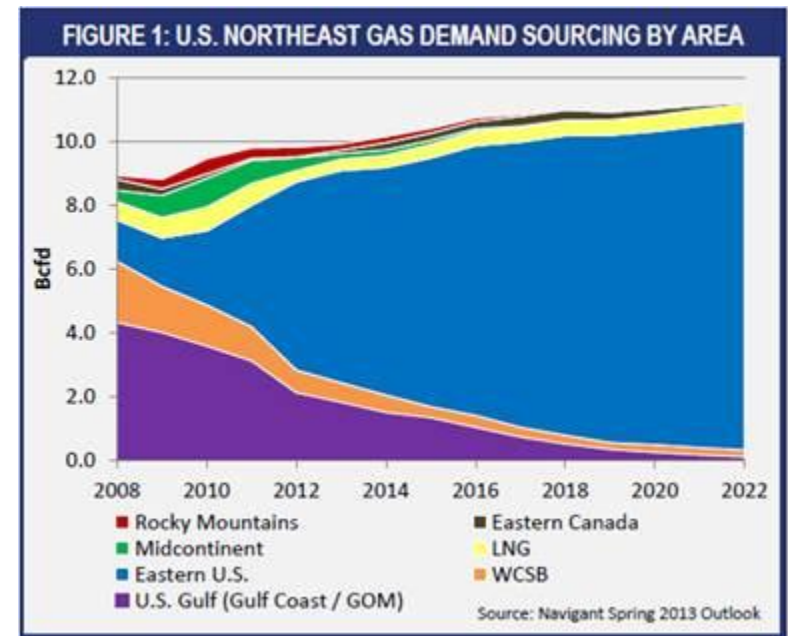
- In Dec. 2013, New England Governors called attention to the shortage of energy infrastructure.
- An open letter was signed by Governors Malloy (CT), LePage (ME), Patrick (MA), Hassan (NH), Chafee (RI), and Shumlin (VT).
- ***“To ensure a reliable, affordable and diverse energy system, we need investments in additional energy efficiency, renewable generation, natural gas pipelines, and electric transmission.”***
- ***“These investments will provide affordable, clean, and reliable energy to power our homes and businesses; make our region more competitive by reducing energy costs; attract more investment to the region; and protect our quality of life and environment.”***



# Current Sources of New England Natural Gas

## New England's Gas Needs:

- In 2013, New England relied on natural gas for **52%** of its electricity produced, more than any other source. (Source: ISO-NE)
- Tennessee Gas Pipeline and Algonquin Gas Pipeline are the two major pipelines transporting natural gas to New England. (Source: U.S. Energy Information Administration)



## Sources of New England's Gas Supply:

- In 2012, the Northeast region received **60%** of its gas supply from Eastern US sources, mainly shale formations. (Source: Navigant North American Natural Gas Market Outlook, Spring 2013)
- In 2008, the Northeast received only **14%** of its natural gas from Appalachia/Eastern U.S. sources such as the Marcellus shale. (Source: Navigant, Spring 2013)
- It is estimated that by 2022, based on current trends and source supply that the Northeast will receive **92%** of its gas supply from Eastern US sources. (Source: Navigant North American Natural Gas Market Outlook, Spring 2013)

# Northeast Energy Crisis

**The energy situation is likely to worsen if no new capacity is constructed;**

- Currently, **four** large New England coal, oil and nuclear power plants are planning to retire in the next few years due to increasing operating costs and new emissions standards. This includes the Brayton Point and Salem Harbor Plants in MA, the Norwalk Harbor Plant in CT, and the Vermont Yankee plant in VT. (Source: ISO-NE, 2013)
- Unless new capacity is provided, New England's power system will be increasingly vulnerable to electric service disruptions and consumer prices will increase greatly. The region will be at **a large economic and competitive disadvantage** to neighboring states and regions due to high energy costs. (Source: New England States Committee on Electricity, 2014)

## **Solution:**

- NESCOE, ISO-NE, and New England's Governors have all publically identified **natural gas pipelines** as a solution to the Northeast Energy crisis.



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# Northeast Energy Direct Project Introduction

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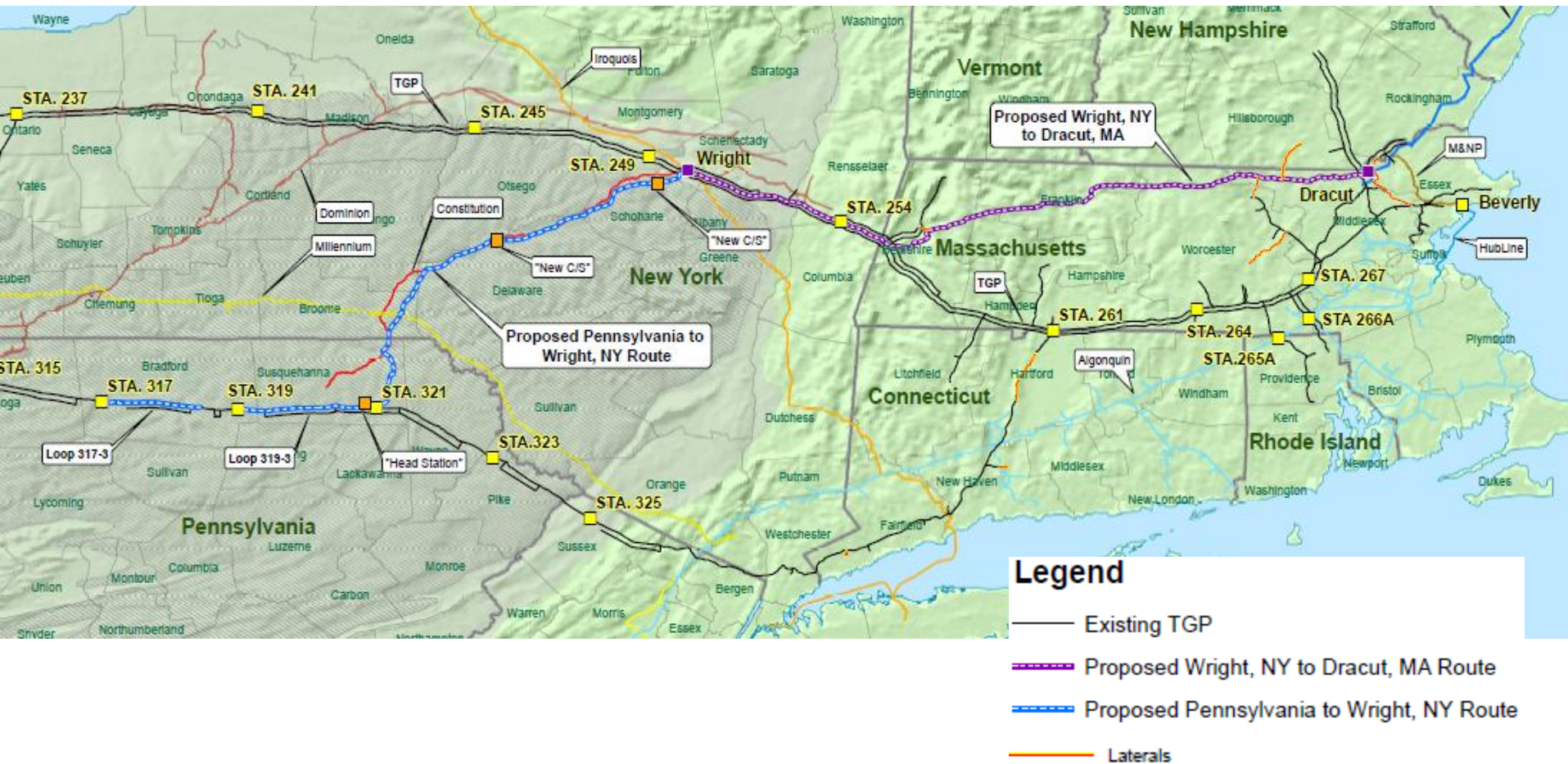
# Northeast Energy Direct Project Overview

- The Northeast Energy Direct Project will expand the existing Tennessee Gas Pipeline system within Pennsylvania, New York, Massachusetts, New Hampshire and Connecticut.
- The project, as currently configured, would result in the construction of approx. 418 miles of new pipeline, additional meter stations, compressor stations and modifications to existing facilities.
- The expansion will help meet increased demand in the U.S. Northeast for transportation capacity for natural gas.
- Following completion, the proposed project could bring an estimated increased capacity of up to 2.2 Bcf/d to the Northeast, which is equivalent to an additional 1.5MM households.
- Pending receipt of necessary regulatory approvals, the proposed project is estimated to be placed in-service by November 2018.
- The project is estimated to generate an additional \$25M to local taxing bodies in MA.

## Estimated Project Schedule

Action	Timing
Outreach Meetings	Ongoing
Route Selection and Permit Preparation	Ongoing
Agency Consultations	Ongoing
File for FERC pre-filing	October 2014
KM Open Houses	November – December 2014
FERC Scoping Meetings	January – February 2015
FERC filing	Sept. 2015
Anticipated FERC approval	November 2016
Proposed Start of Construction Activity	January 2017
Proposed In-Service	November 2018

# Proposed Northeast Energy Direct Route



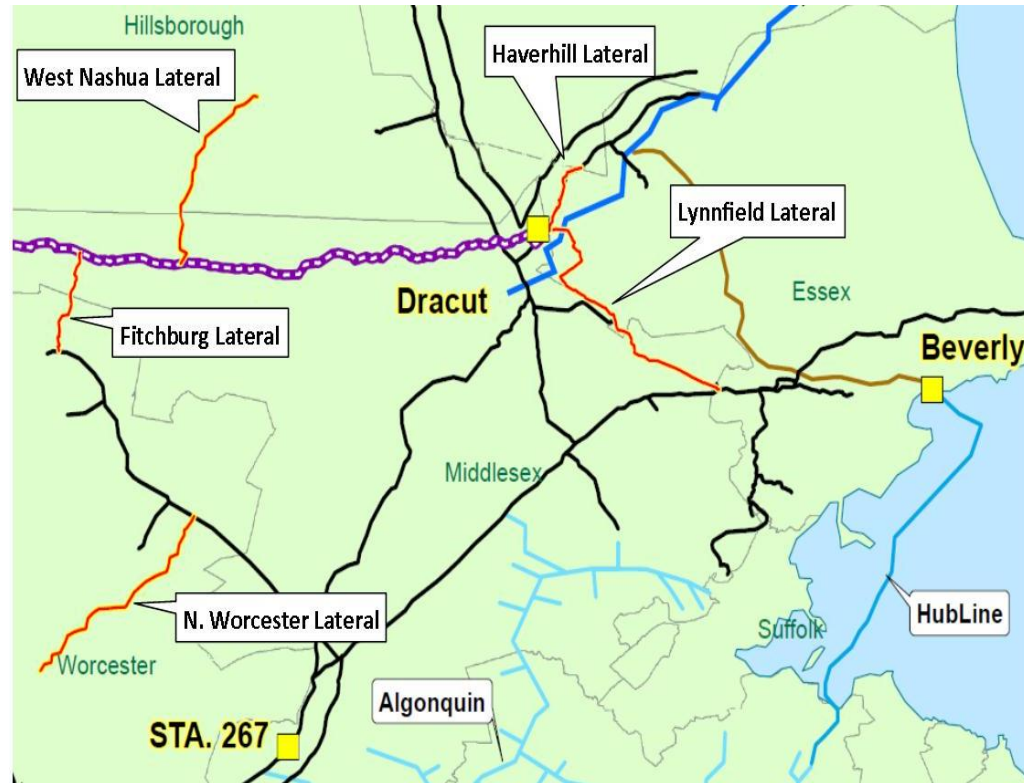
*\*Any final route determination is subject to surveying, land acquisition and easements, environmental impact assessments, permitting and stakeholder input.*



# Northeast Energy Direct Components

## Proposed project components:

- **Pennsylvania to Wright, NY**
- **Wright, NY to Dracut, MA**
- West Nashua Lateral (MA/NH)
- N. Worcester Lateral (MA)
- Pittsfield Lateral (MA)
- Stamford Delivery Loop (CT)
- Wallingford Delivery Loop (CT)
- Fitchburg Lateral Extension (MA)
- Haverhill Lateral (MA)
- Lynnfield Lateral (MA)
- 300 Line CT Lateral (CT)



# Regulatory Oversight

Federal, state and local agencies will have extensive regulatory authority over the proposed project. Some of these include:

## Federal

- Federal Energy Regulatory Commission
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Department of Agriculture
- U.S. Department of the Interior

## State

- Massachusetts State Legislature
- Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA)
  - Dept. of Public Utilities
  - Dept. of Fish and Game
  - Dept. of Environmental Protection
  - Dept. of Agricultural Resources
  - Office of Coastal Zone Management
- MA Energy Facilities Siting and Licensing Board

- MA Historical Commission

## Local

- MA Town Conservation Commissions



# Preliminary Northeast Energy Direct Town List (MA)

## **Berkshire County**

- Dalton, MA
- Hinsdale, MA
- Lenox, MA
- Peru, MA
- Pittsfield, MA
- Richmond, MA
- Washington, MA
- Windsor, MA

## **Essex County**

- Andover, MA
- Lynnfield, MA
- Methuen, MA

## **Franklin County**

- Ashfield, MA
- Conway, MA
- Deerfield, MA
- Erving, MA

- Montague, MA
- Northfield, MA
- Orange, MA
- Shelburne, MA
- Warwick, MA

## **Hampshire County**

- Plainfield, MA

## **Middlesex County**

- Ashby, MA
- Dracut, MA
- Dunstable, MA
- Groton, MA
- North Reading, MA
- Pepperell, MA
- Reading, MA
- Tewksbury, MA
- Townsend, MA
- Tyngsborough, MA

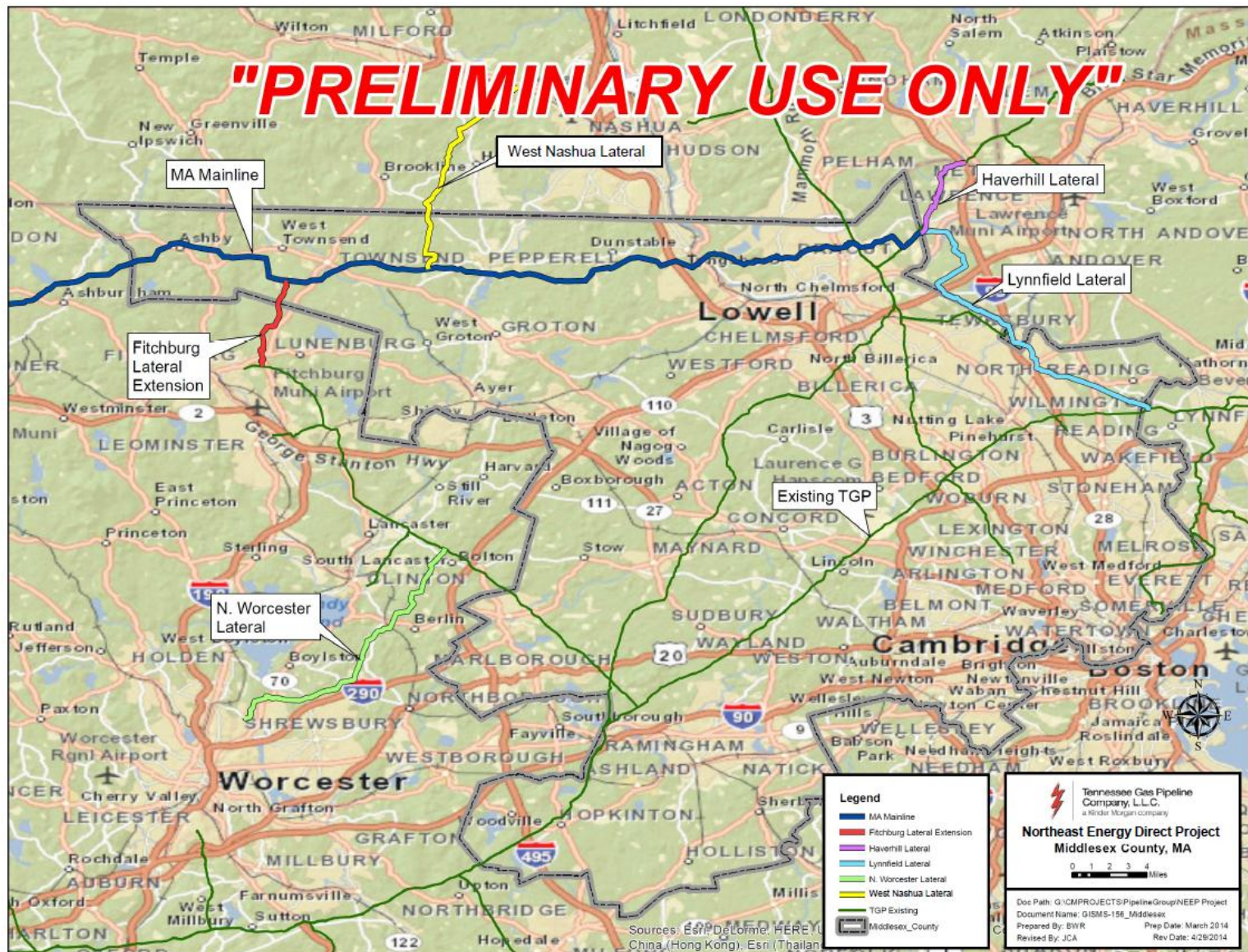
- Wilmington, MA

## **Worcester County**

- Ashburnham, MA
- Athol, MA
- Berlin, MA
- Bolton, MA
- Boylston, MA
- Gardner, MA
- Lunenburg, MA
- Northborough, MA
- Royalston, MA
- Shrewsbury, MA
- West Boylston, MA
- Winchendon, MA

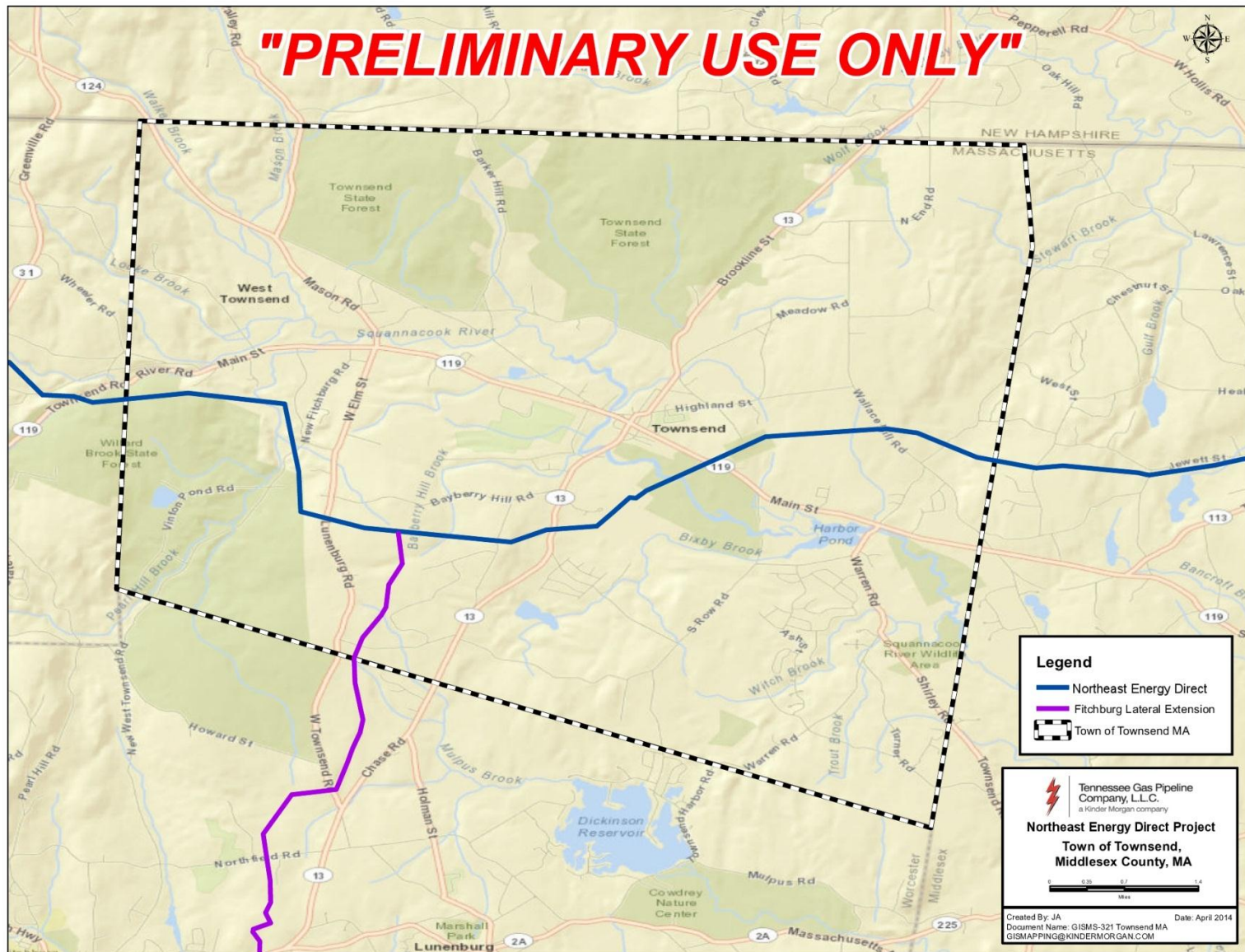


# Middlesex County Map





# Townsend Town Map



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# Northeast Energy Direct Project Benefits





# Project Benefits

- An estimated additional \$25M to local taxing bodies in MA
- Estimated creation of 3,000 construction-related jobs
- Economic stimulus to surrounding areas during construction (retail, hospitality, etc.)
- Providing long-term energy reliability to the region
- Creates potential new source of energy for communities
- Platform for growth; expandable to meet future needs





# Next Steps

## Our Commitment to Local Communities



# Massachusetts Outreach

## Project Briefings:

- Governor Deval Patrick
- Office of U.S. Senator Elizabeth Warren
- Office of U.S. Senator Ed Markey
- Office of Congressman Jim McGovern
- Office of Congressman John Tierney
- Office of Congresswoman Niki Tsongas
- Office of Congressman Richard Neal
- Office of Congressman Joe Kennedy
- Office of Congresswoman Katherine Clark
- Senator Benjamin Downing
- State Senate Majority Leader Stan Rosenberg
- Senator Stephen Brewer
- Senator Barry Finegold
- Senator Eileen Donoghue
- Senator Harriette Chandler
- Senator Jennifer Flanagan
- State House Speaker Robert DeLeo
- State Representative Stephen Kulik
- State Representative William Pignatelli
- State Representative Tricia Farley-Bouvier
- State House Minority Leader Bradley Jones
- State Representative Stephen DiNatale
- State Representative Colleen Garry
- State Representative Anne Gobi
- Office of Senator Bruce Tarr
- Office of Senator Michael Moore
- Department of Public Utilities
- Office of Energy and Environmental Affairs
- Department of Fish and Game
- Coastal Zone Management
- Department of Agricultural Resources
- Department of Energy Resources
- Department of Environmental Protection

## Town Contacts:

- Dalton
- Hinsdale
- Lenox
- Peru
- Pittsfield
- Richmond
- Washington
- Windsor
- Andover
- Lynnfield
- Methuen
- Ashfield
- Conway
- Deerfield
- Erving
- Greenfield
- Montague
- Northfield
- Orange
- Shelburne
- Warwick
- Plainfield
- Ashby
- Dracut
- Dunstable
- Groton
- North Reading
- Pepperell
- Tewksbury
- Townsend
- Tyngsborough
- Wilmington
- Ashburnham
- Athol
- Berlin
- Bolton
- Boylston
- Gardner
- Lunenburg
- Northborough
- Royalston
- Shrewsbury
- Winchendon
- Worcester





# Project Presentations to Date

- **April 7, 2014:** Montague (MA) Board of Selectmen
- **April 8, 2014:** Dracut (MA) Board of Selectmen
- **April 9, 2014:** Ashburnham (MA) Board of Selectmen
- **April 21, 2014:** Hollis (NH) Public Meeting
- **April 22, 2014:** Plainfield (MA) Board of Selectmen
- **April 23, 2014:** Ashby (MA) Board of Selectmen
- **May 12, 2014:** Pepperell (MA) Board of Selectmen
- **May 13, 2014:** Warwick (MA) Public Meeting
- **May 14, 2014:** Tyngsborough (MA) Board of Selectmen
- **June 4, 2014:** Richmond (MA) Board of Selectmen
- **June 5, 2014:** North Reading (MA) Board of Selectmen
- **June 23, 2014:** Groton (MA) Board of Selectmen
- **June 24, 2014:** Tewksbury (MA) Board of Selectmen



# Kinder Morgan in the Community

2014 Donation to Eastern Pike Regional Police Department to support national gas conversion of squad cars.



In 2013, Tennessee Gas Pipeline donated to the Milford Beach in the Delaware Gap National Recreation Area to keep it open for the summer.



In 2013, Parkway Pipeline supported the Collins, MS Fire Department.

In 2013, Kinder Morgan donated 3,000 tree saplings to elementary schools in seven counties across NJ and PA to celebrate Arbor Day.



In 2012, Parkway Pipeline (a KM subsidiary) provided the funding for the construction of a new playground in Pelican Park in Mandeville, LA



# Kinder Morgan Foundation

- **The Kinder Morgan Foundation** funds programs that promote the academic and artistic interests of young people in the many cities and towns across North America where Kinder Morgan operates.



*Science from Scientists, Inc., Boston, MA*



*Berkshire Museum, Pittsfield, MA*



*Please Touch Museum, Philadelphia, PA*

[www.kindermorgan.com/community](http://www.kindermorgan.com/community)

**KINDER MORGAN**



# Kinder Morgan Contact Information

## **Project Website:**

[www.kindermorgan.com/business/gas\\_pipelines/east/neenergydirect/](http://www.kindermorgan.com/business/gas_pipelines/east/neenergydirect/)

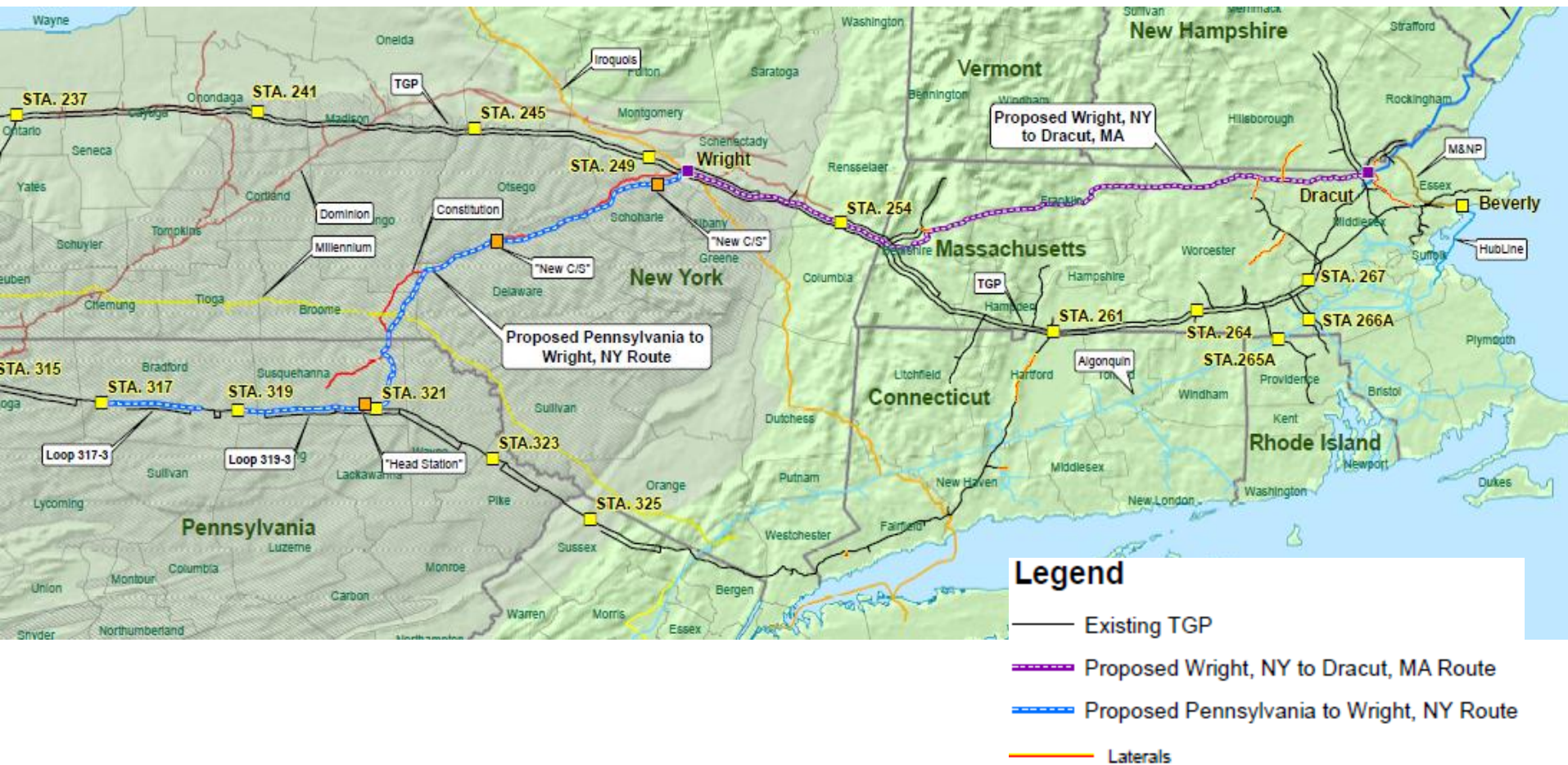
## **Public Affairs/Project Outreach**

- Allen Fore  
630-725-3044  
[allen\\_fore@kindermorgan.com](mailto:allen_fore@kindermorgan.com)

## **Media Relations**

- Richard Wheatley  
713-420-6828  
[richard\\_wheatley@kindermorgan.com](mailto:richard_wheatley@kindermorgan.com)

# Northeast Energy Direct Project



*\*Any final route determination is subject to surveying, land acquisition and easements, environmental impact assessments, permitting and stakeholder input.*



# Kinder Morgan Asset Map

