Tennessee Gas Pipeline Co, L.L.C.
Northeast Energy Direct Project

Franklin County Regional Council of Governments
July 24, 2014
Kinder Morgan Assets

- 3rd largest energy company in North America with combined enterprise value of approximately $110 billion (a)
- Largest natural gas network in North America
  - Own an interest in / operate ~68,000 miles of natural gas pipeline
  - Connected to every important U.S. natural gas resource play, including: Eagle Ford, Marcellus, Utica, Uinta, Haynesville, Fayetteville and Barnett
- Largest independent transporter of petroleum products in North America
  - Transport ~2.3 MMBbl/d (b)
- Largest transporter of CO₂ in North America
  - Transport ~1.3 Bcf/d of CO₂ (b)
- Largest independent terminal operator in North America
  - Own an interest in or operate ~180 liquids / dry bulk terminals
  - ~125 MMBbls domestic liquids capacity
  - Handle ~103 MM tons of dry bulk products (b)
- Only Oilsands pipe serving West Coast
  - Transports ~300 MMBbl/d to Vancouver/Washington State; proposed expansion takes capacity to 890 MMBbl/d

(a) Combined enterprise value of KMI, KMP & EPB; see footnotes on slide 9 for further information.
(b) 2014 budgeted volumes.
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

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Abundant & Growing Supply
- Marcellus, Utica, Eagle Ford, Haynesville, Fayetteville
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
### MA Municipalities with existing TGP Lines

- Acton
- Adams
- Agawam
- Andover
- Arlington
- Ashland
- Auburn
- Bellingham
- Billerica
- Bolton
- Burlington
- Carlisle
- Charlton
- Cheshire
- Clinton
- Concord
- Danvers
- Douglas
- Dracut
- East Longmeadow
- Easthampton
- Everett
- Framingham
- Grafton
- Granville
- Hampden
- Haverhill
- Holland
- Holyoke
- Hopkinton
- Hudson
- Lancaster
- Lanesborough
- Lee
- Leominster
- Lexington
- Lincoln
- Longmeadow
- Lunenburg
- Lynnfield
- Malden
- Marlborough
- Melrose
- Mendon
- Methuen
- Millbury
- Monson
- Monterey
- North Adams
- Northampton
- Northridge
- Otis
- Oxford
- Peabody
- Pittsfield
- Reading
- Revere
- Richmond
- Sandisfield
- Saugus
- Southampton
- Southbridge
- Southwick
- Spencer
- Stockbridge
- Sturbridge
- Sudbury
- Sutton
- Tewksbury
- Tolland
- Tyringham
- Upton
- Uxbridge
- Wales
- Wayland
- Westfield
- Westford
- Wilmington
- Winchester
- Woburn
MASSACHUSETTS
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.
- 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 has offices in Agawam and Hopkinton, MA.

Kinder Morgan operates assets in eight counties throughout Massachusetts: Berkshire, Essex, Hampden, Hampshire, Middlesex, Norfolk, Suffolk and Worcester
The Need for the Northeast Energy Direct Project
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)
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)
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.
Northeast Energy Direct Project

Introduction
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.

<table>
<thead>
<tr>
<th>Action</th>
<th>Timing</th>
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<tbody>
<tr>
<td>Outreach Meetings</td>
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<td>Route Selection and Permit Preparation</td>
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<td>Agency Consultations</td>
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<td>File for FERC pre-filing</td>
<td>September 2014</td>
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<td>KM Open Houses</td>
<td>November – December 2014</td>
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<td>FERC Scoping Meetings</td>
<td>January – February 2015</td>
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<td>FERC filing</td>
<td>Sept. 2015</td>
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<td>Anticipated FERC approval</td>
<td>November 2016</td>
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<tr>
<td>Proposed Start of Construction Activity</td>
<td>January 2017</td>
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<td>Proposed In-Service</td>
<td>November 2018</td>
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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)
- Fitchburg Lateral Extension (MA)
- Haverhill Lateral (MA)
- Lynnfield Lateral (MA)
- 300 Line CT Lateral (CT)
## Preliminary Northeast Energy Direct Town List (MA)

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<th>Berkshire County</th>
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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

**Local**
- MA Historical Commission
- MA Town Conservation Commissions

**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
The FERC Review Process (part 1)

Pre-Filing Environmental Review Process

Applicant Process:
- Assesses market need and considers project feasibility
- Studies potential site locations
- Identifies Stakeholders
- Requests use of FERC’s Pre-Filing Process
- Holds open house to discuss project
- Files formal application with the FERC

FERC Process:
- Receives Applicant’s request to conduct its review of the project within FERC’s NEPA Pre-Filing Process
- Formally approves Pre-Filing Process, issues PF Docket No. to Applicant, and begins project review
- Participates in Applicant’s open house
- Issues Notice of Intent for Preparation of an E/EIS. Opens NEPA scoping period to seek public comments on the project.
- Holds NEPA scoping meeting(s) and site visit in the project area. Consults with interested agencies.

Public Input Opportunities:
- Receives formal application from Applicant
The FERC Review Process (part 2)

**Public Input Opportunities**

- May construct and operate the project, only after obtaining Clean Water Act, Coastal Zone Management Act, and Clean Air Act permits.
- Applicant and/or Public can ask FERC to rehear case or refer to FERC Administrative Law Judge
- Applicant and/or Parties can take FERC to Court

**EIS**
- Issues Preliminary Draft EIS to cooperating agencies for review
- Issues Draft EIS and opens comment period
- Holds meeting(s) in the project area to hear public comments on the Draft EIS
- Responds to comments and revises the Draft EIS
- Issues Final EIS
- Approves or denies project

**EA**
- Issues Preliminary Draft EA to cooperating agencies for review
- Issues EA and opens comment period
- Responds to comments received on EA in Commission Order
Existing Rights-of-Way in MA

Kilburn Street, Lunenburg, MA

Main St., Wilmington, MA

Florence Rd., Northampton, MA

Lancaster Ave., Lunenburg, MA
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
- June 25, 2014: Townsend (MA) Board of Selectmen
- June 26, 2014: Bolton (MA) Board of Selectmen
- July 8, 2014: Erving (MA) Board of Selectmen
- July 9, 2014: Andover (MA) Board of Selectmen
- July 10, 2014: Wilmington (MA) Board of Selectmen
- July 15, 2014: Lunenburg (MA) Board of Selectmen
- July 22, 2014: Royalston (MA) Board of Selectmen
- July 23, 2014: Berlin (MA) Board of Selectmen
- July 24, 2014: Shelburne (MA) Board of Selectmen
Kinder Morgan in the Community

In 2013, Parkway 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.
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
Kinder Morgan Contact Information

Project Website:
www.kindermorgan.com/business/gas_pipelines/east/neenergydirect/

Public Affairs/Project Outreach
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Media Relations
• Richard Wheatley
  713-420-6828
  richard_wheatley@kindermorgan.com
Proposed Northeast Energy Direct Route

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

"PRELIMINARY USE ONLY"