Northeast GAS ASSOCIATION

February 7, 2017
Berlin, CT

Natural Gas Infrastructure

Remarks at:

Connecticut Energy Infrastructure Outlook



Stephen Leahy
Northeast Gas Association

About NGA

- Non-profit trade association
- Local gas utilities (LDCs) serving New England, New York, New Jersey, Pennsylvania
- Several interstate pipeline companies
- LNG importers (Distrigas, Repsol) and LNG trucking companies
- Over 325 “associate member” companies, from industry suppliers and contractors to electric grid operators
- www.northeastgas.org



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NGA'S ANTITRUST COMPLIANCE PROCEDURES

Adopted by the NGA Board of Directors on June 4, 2003

Objective

The Northeast Gas Association (NGA) and its member companies are committed to full compliance with all laws and regulations, and to maintaining the highest ethical standards in the way we conduct our operations and activities. Our commitment includes strict compliance with federal and state antitrust laws, which are designed to protect this country's free competitive economy.

Responsibility for Antitrust Compliance

Compliance with the antitrust laws is a serious business. Antitrust violations may result in heavy fines for corporations, and in fines and even imprisonment for individuals. While NGA's attorneys provide guidance on antitrust matters, you bear the ultimate responsibility for assuring that your actions and the actions of any of those under your direction comply with the antitrust laws.

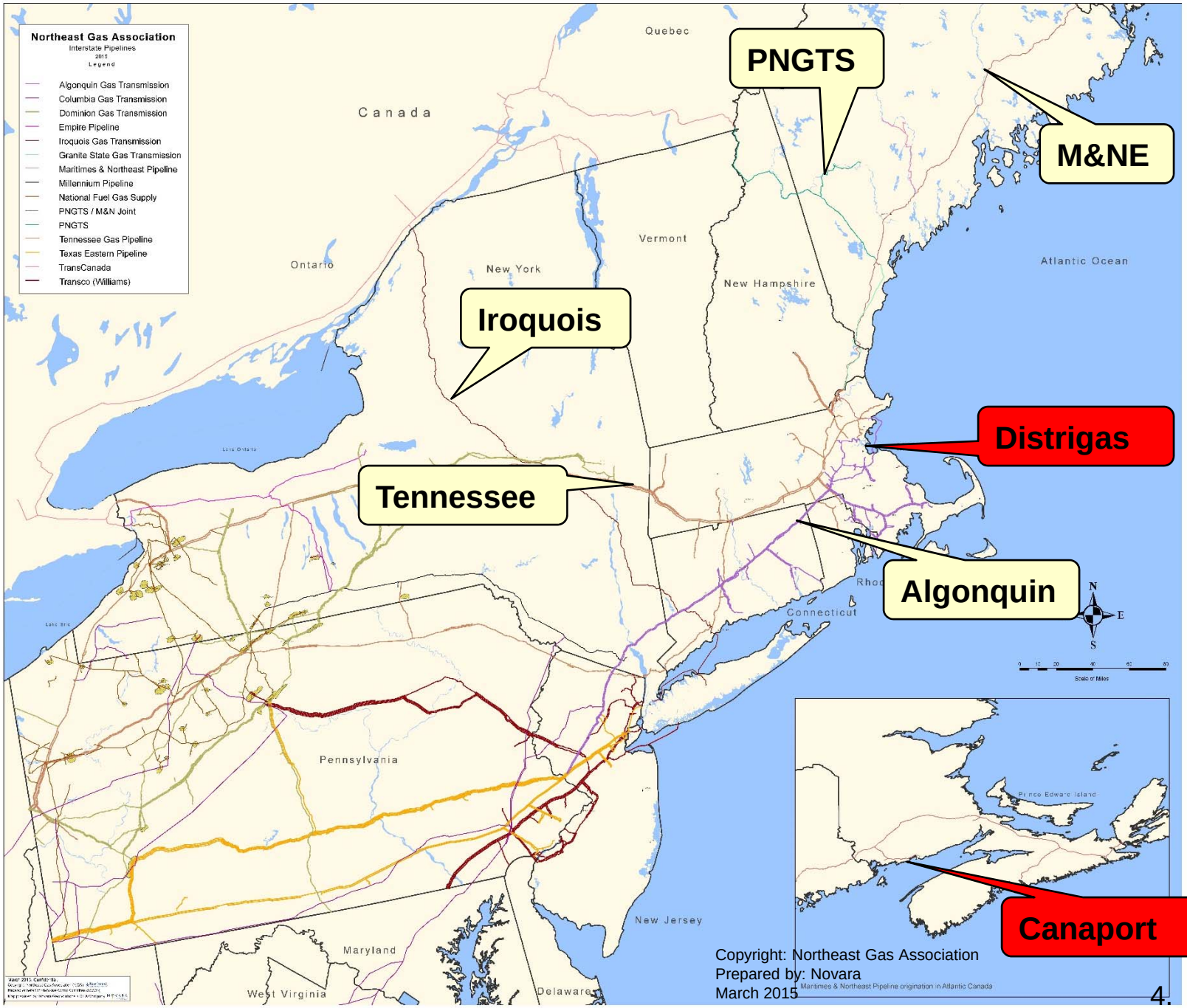
Antitrust Guidelines

In all NGA operations and activities, you must avoid any discussions or conduct that might violate the antitrust laws or even raise an appearance of impropriety. The following guidelines will help you do that:

- ***Do*** consult counsel about any documents that touch on sensitive antitrust subjects such as pricing, market allocations, refusals to deal with any company, and the like.

Continued on NGA web site...

http://www.northeastgas.org/about-nga/antitrust-guidelines



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Prepared by: Novara
March 2015

Natural Gas Service / Market Share in New England

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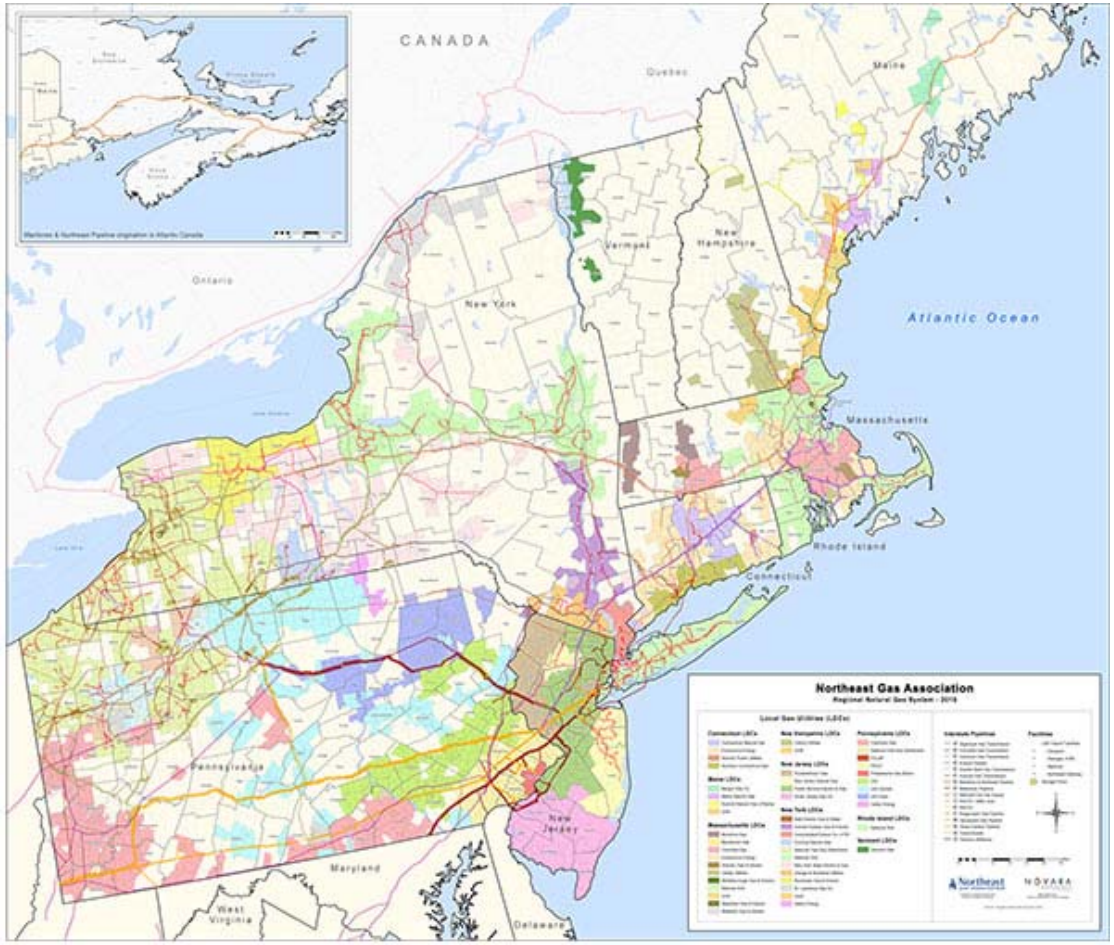
For New England

Gas = 39% of home heating

Gas = 49% of power gen

Gas = 48% of proposed power gen in ISO-NE queue

2.7 million gas customers in the 6 states



Connecticut Natural Gas System

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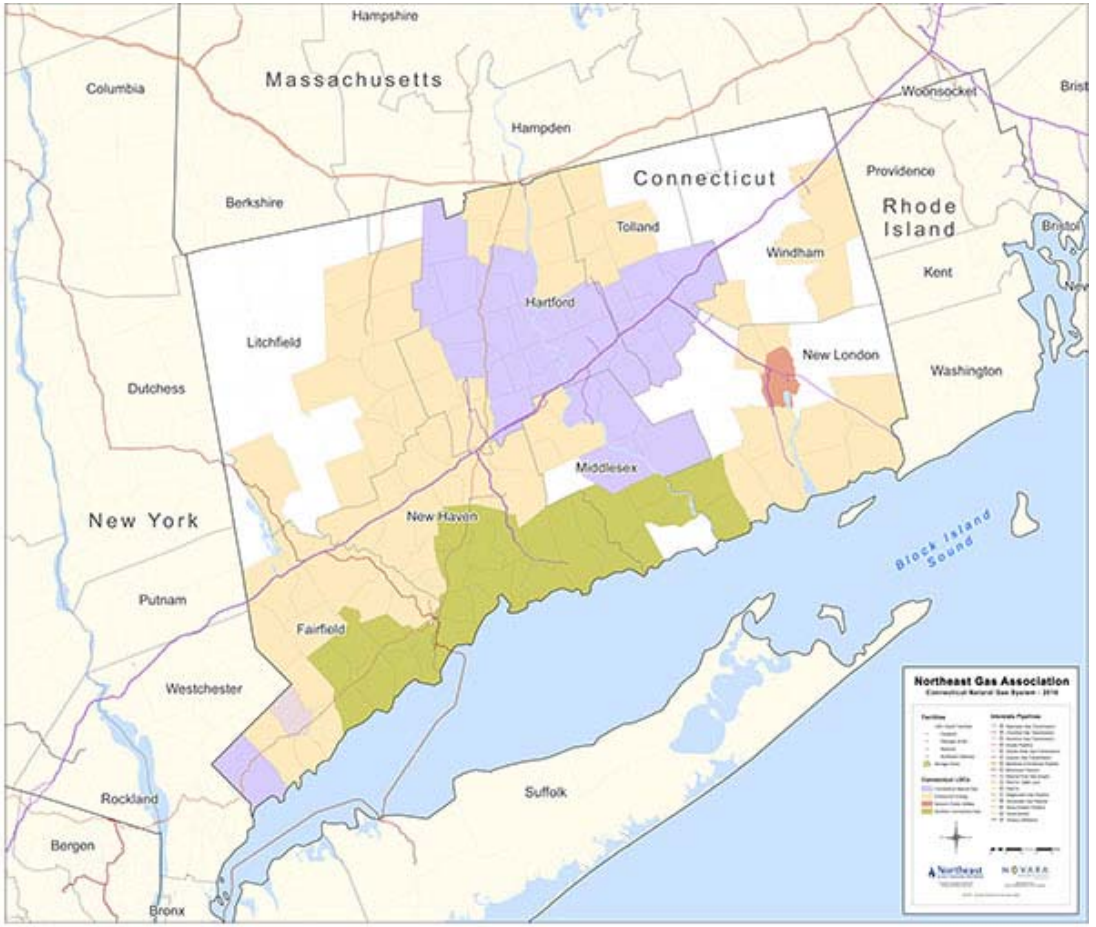
For CT

Gas = 32% of primary energy

Gas = 35% of home heating

Gas = 35% of power gen

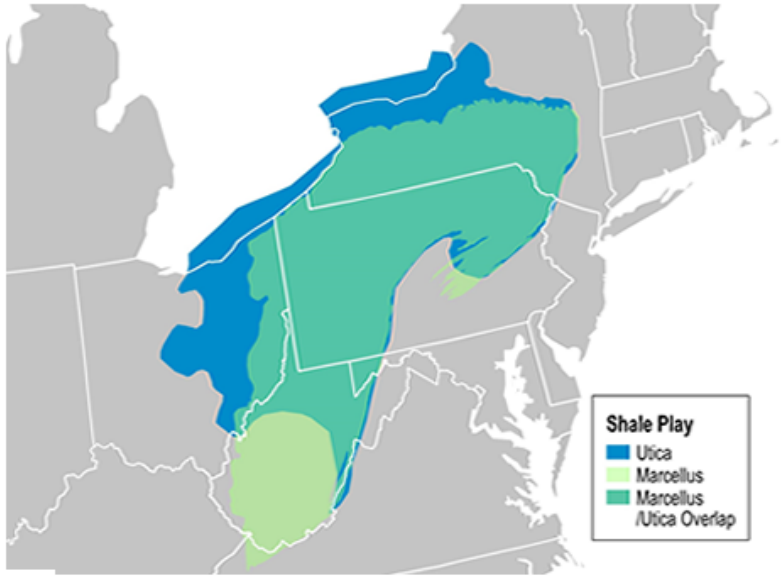
~600,000 gas customers



“Nearby” Production

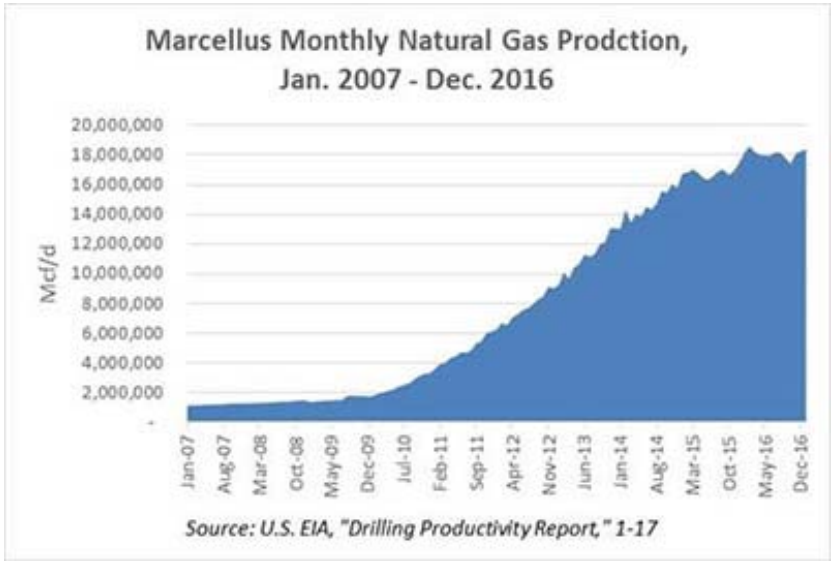
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Utica and Marcellus shale plays



Source: U.S. EIA, 7-14

eia Source: U.S. Energy Information Administration.



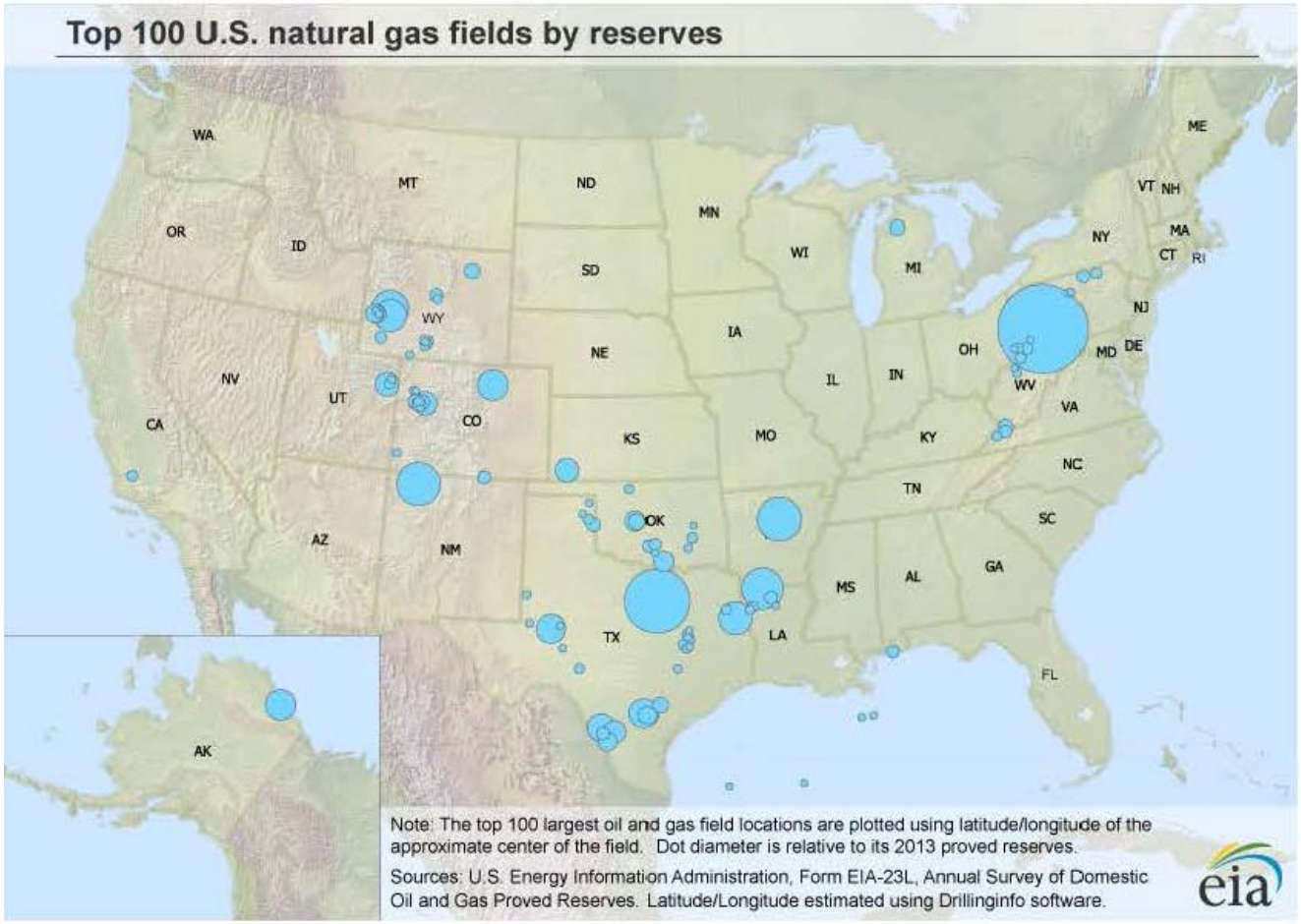
U.S. natural gas production in 2015 set new all-time record: ~***75 Bcf/d***.

Marcellus Shale currently producing ***18 Bcf/d***.

PA is now 2nd largest gas producing state in U.S.

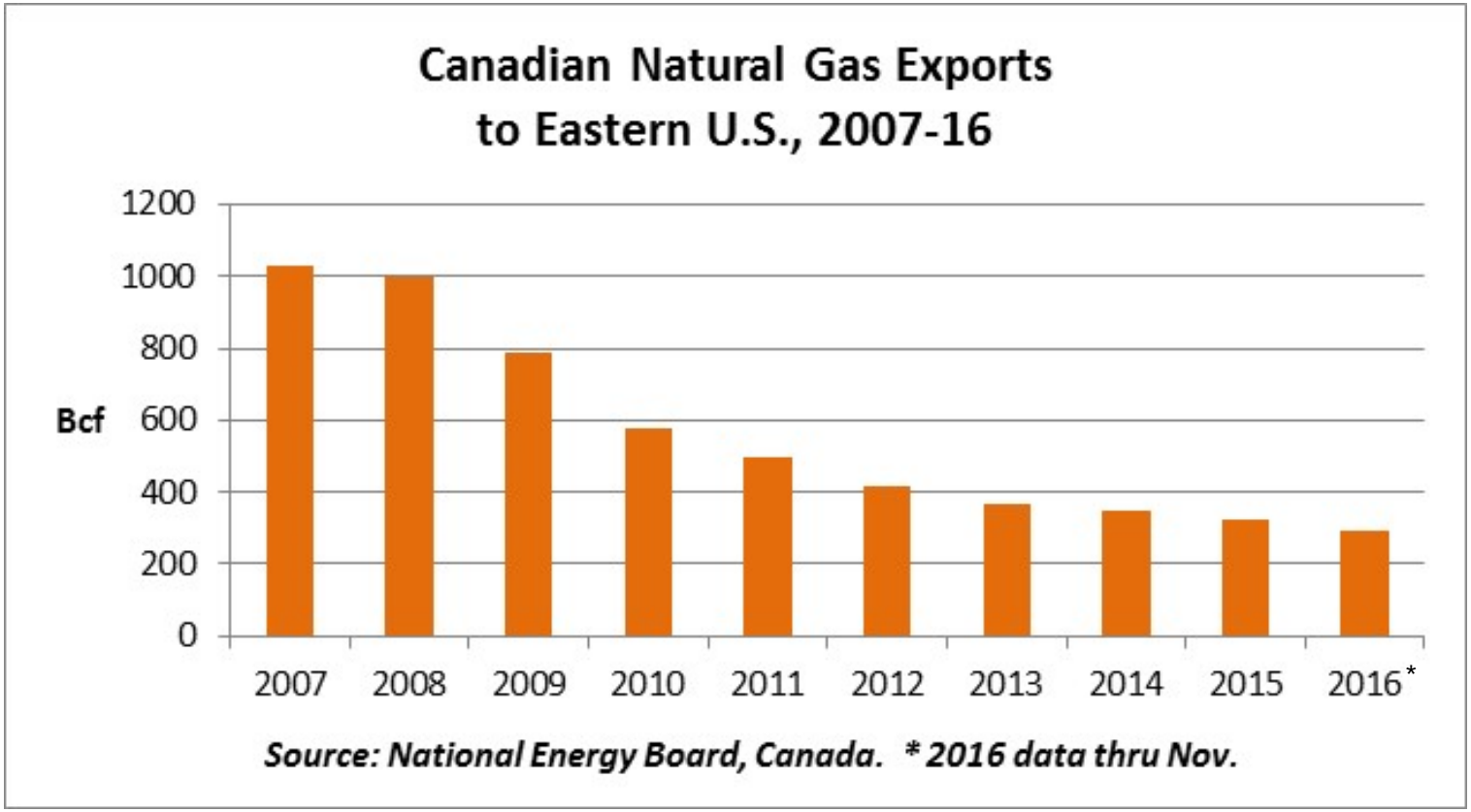
Marcellus: Largest U.S. Gas Resource Base

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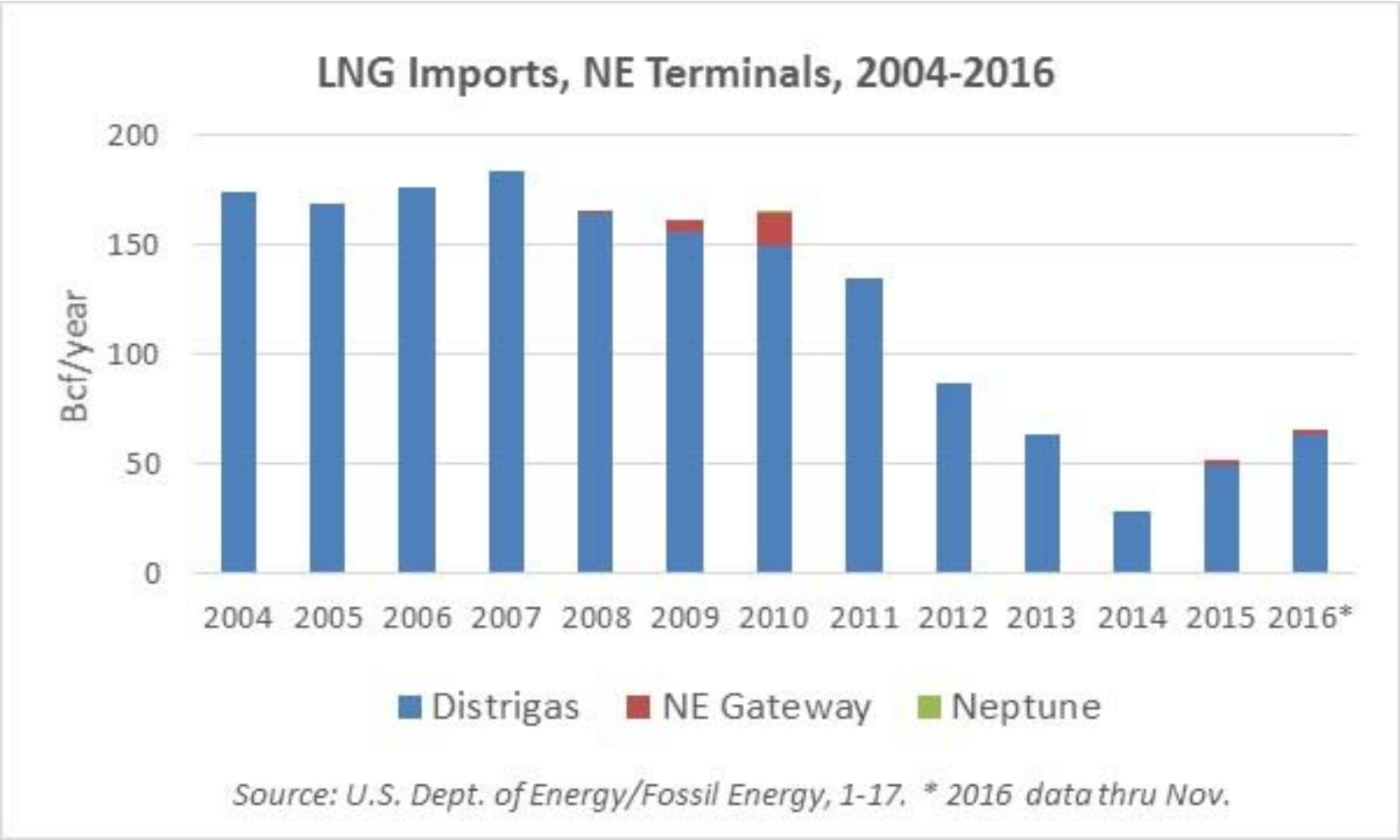


Source: U.S. EIA, 4-15

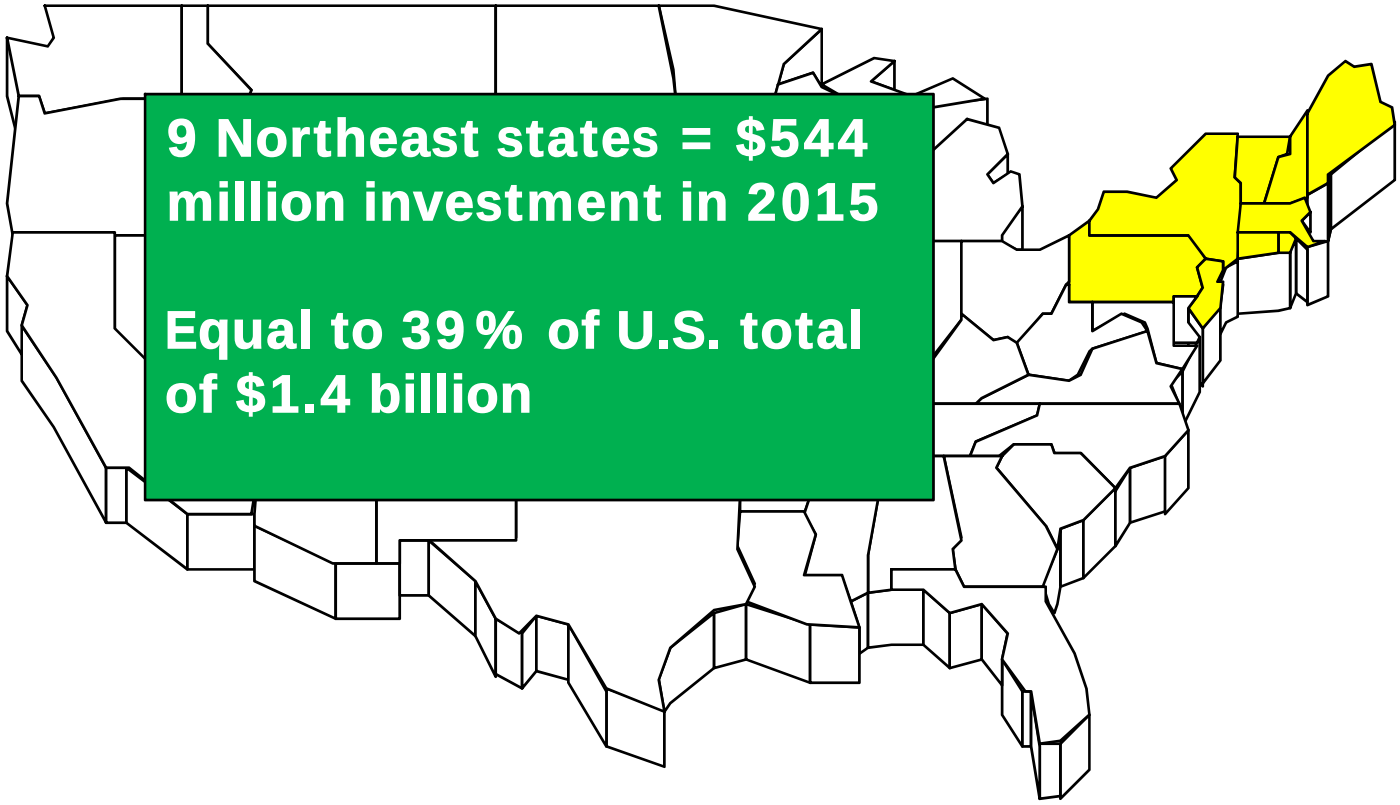
Canadian Gas Exports to Region



LNG Volumes Imports by New England-Based Terminals

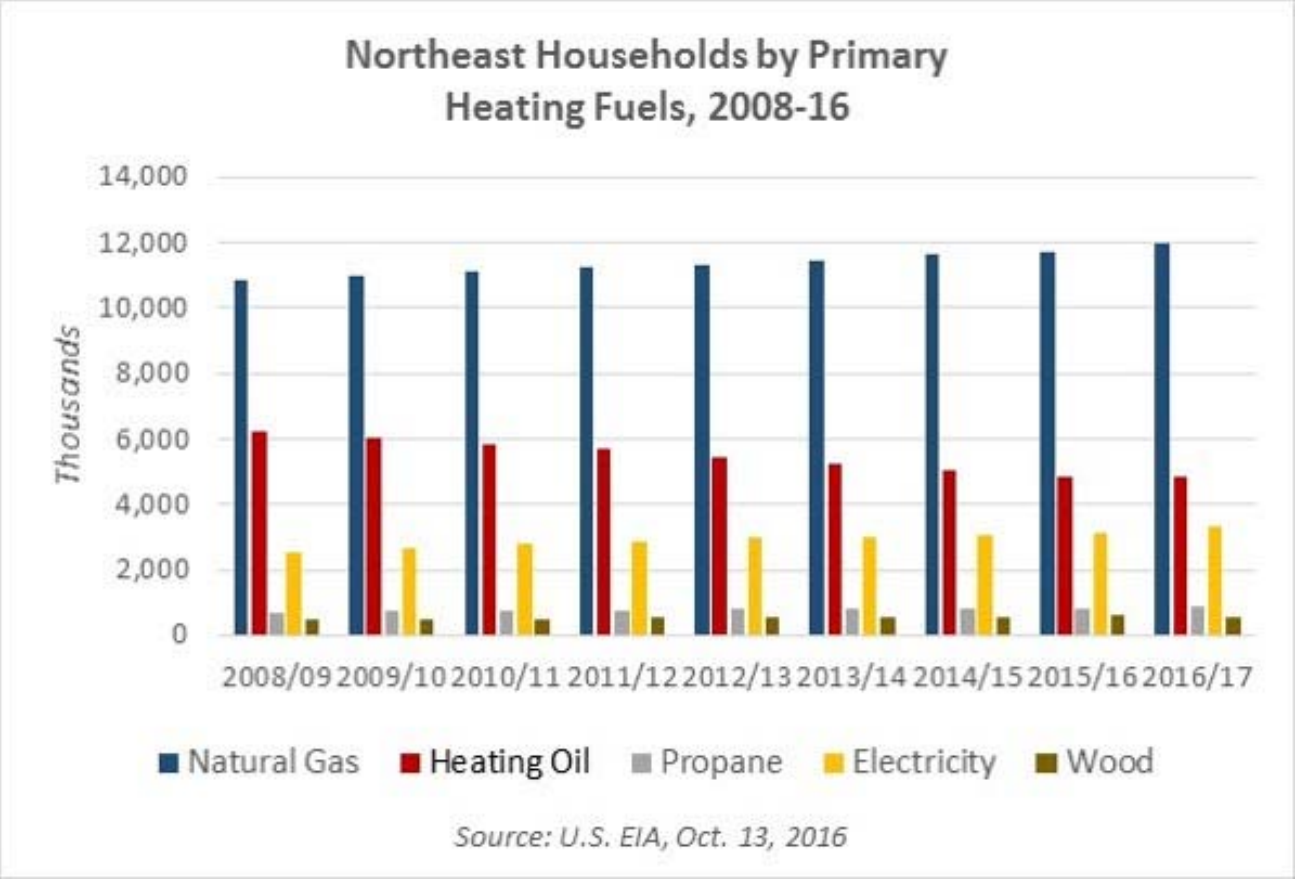


Northeast States Lead U.S. in Gas Efficiency Investments



Source: ACEEE, "2016 State Energy Efficiency Scorecard", released Sept. 2016

Gas Customer Base in Region Continues to Grow



Natural Gas added over 1 million new household customers in last 8 years

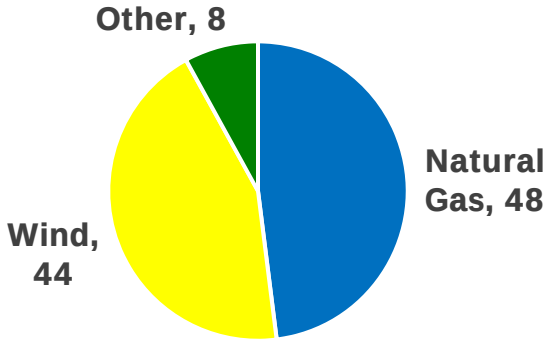
Utilities Continue to Set Sendout Records

- New England gas LDCs set a new sendout record of 4 Bcf on Feb. 14, 2016 (a Sunday)
- New York State set a new record for gas demand on Feb. 13, 2016 of 6.6 Bcf
- Gas utilities experiencing rising design day demand.

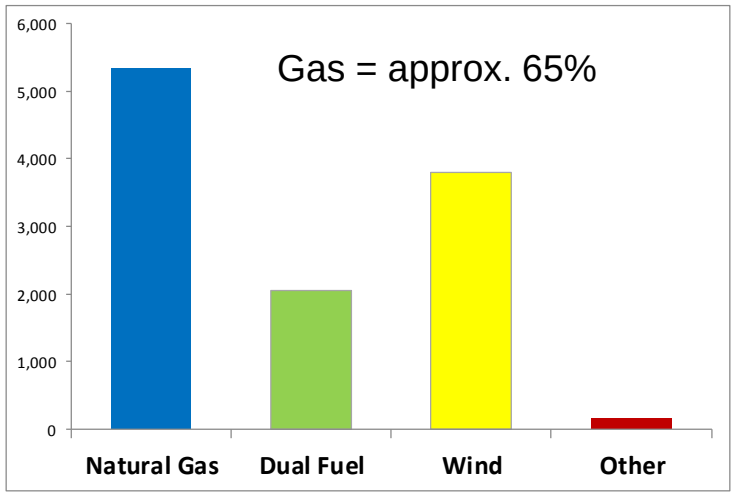


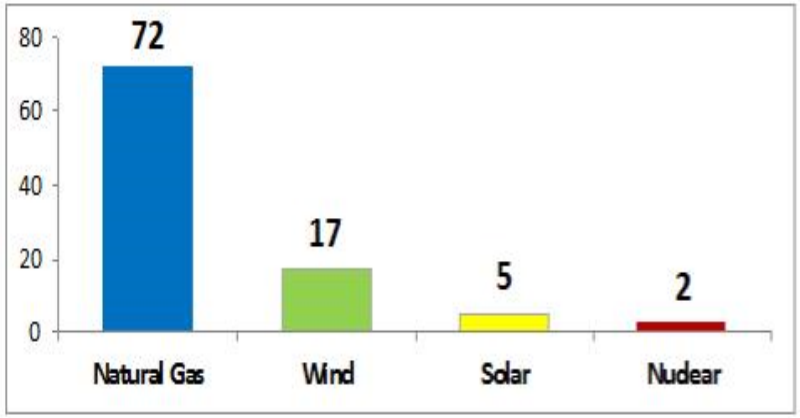
Projected Power Sector Additions by Fuel Type

GENERATOR PROPOSALS IN THE ISO NEW ENGLAND QUEUE
Percentage, Jan. 2017



NEW YORK ISO SYSTEM, 2016
Proposed Power Projects by Fuel Type
Megawatts





PJM, 2015
Queued Capacity by Fuel Type, Percentage

Regional Pipeline Projects: Status

PROJECT	SUMMARY	STATUS
Spectra's "AIM"	342 MMcf/d, serving NE gas LDCs	In-service, Nov. 2016, Jan. 2017
Tennessee's "Northeast Energy Direct"	1.3 Bcf/d, designed to serve gas LDCs & power gen sector	Withdrawn, 4-16; ½ capacity subscribed by gas LDCs
Tennessee's "Connecticut Expansion"	72 MMcf/d, designed to serve gas LDCs	Approved by FERC; planned in-service later this year
Spectra's "Atlantic Bridge"	132 MMcf/d. Customers: 4 LDCs, 2 manufacturing and industrial companies, and a municipal utility located in CT, MA, ME and Atlantic Canada	Approved by FERC, 1-17; planned in-service this Nov.
PNGTS's "C2C"	92 MMcf/d	In-service 11-1-17
Spectra's "Access Northeast"	0.9 Bcf/d, to serve power gen sector; combination of new pipe capacity & LNG storage	Planned service date delayed to 2019, seeking financing pathway

Opposition to Energy Infrastructure

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Summary

- Gas utilities in region continue to see growth on systems and to plan infrastructure investments to meet that growth.
- Natural gas continues to be essential part of region's power system – and will balance / enable increasing renewable additions.
- Additional pipeline infrastructure needed to meet demand; projects in development; siting challenges on the increase.