Natural Gas Availability

The Northeast Power Coordinating Council General Meeting

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 300 “associate member” companies, from industry suppliers and contractors to electric grid operators
- www.northeastgas.org
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
Topics

- Winter Outlook
- Natural Gas Market Overview
- Infrastructure Development in Last Year
- Regulatory & Environmental Issues
Winter Outlook

- Storage levels in relatively strong position
- U.S. gas production bit lower this year – while Marcellus continues high output
- LNG imports to region higher
- Commodity price higher than last year but still in $3/Mcf range
- Looking ahead, weather, as always, is the biggest variable in supply/price dynamic
Recent Metrics

Storage Levels

Working gas in underground storage compared with the 5-year maximum and minimum billion cubic feet

Spot Price, Jan. 2016 – Nov. 2017

Natural gas spot prices (Henry Hub)

Chart: US. EIA, 11-30-17
Natural Gas Market Overview
Northeast Production


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

PGC gas resource assessments, 1990-2016

- Coalbed gas resources (mean values)
- Shale gas within Traditional resources (most likely values)
- Traditional gas resources: conventional, tight, shale (mean values)
- Continuous growth of gas resources.
- Shale gas is responsible for recent increase in gas resources.

Chart: PGC, 7-17

www.potentialgas.org
Gas Customer Base in Region Continues to Grow

Households by Primary Fuel Type, Northeast U.S., 2009-2017

Source: U.S. EIA, 10-11-17

Natural Gas added over 1 million new household customers in last 8 years.
Continued Growth in Regional Design Day, and New Peaks


- Gas LDC design day numbers are rising

- Con Edison announced earlier in Oct.: “Since 2011, natural gas usage on the coldest winter days in Con Edison’s service territory has grown by more than 30 percent, and is expected to grow an additional 20 percent in the next 20 years.”

Chart: Con Edison, 10-17
Gas utilities in the Northeast are investing in several recent and proposed (incremental) pipeline projects – to meet gas utility demand. State regulatory and legislative support for gas system expansion in several states.
Changing Fuel Alignment

WTI Crude Oil Price Compared to Henry Hub Spot Natural Gas

Chart: MacroTrends, 9-17
Growing Role for Gas in Power in Northeast in Last Decade

Natural Gas was 23% of total regional electric mix in 2006 – increased to 41% in 2016.

Chart: U.S. EIA, 5-11-17
CNG & LNG – Off-System Deliveries

- CNG stations in several states (notably northern New England/New York) provide fuel for vehicle/trucks and also fuel supply for truck deliveries to off-system customers – from paper mills to medical centers

- Building the market prior to development of gas distribution or transmission system
  - e.g., Middlebury, Vermont as “gas island” by NG Advantage, with gas sourced at Vermont Gas
Northeast States Lead U.S. in Gas Efficiency Investments

9 Northeast states = $519 million investment in 2016
Equal to 39% of U.S. total of $1.3 billion

Infrastructure Developments
Project Completed in Late 2016/Early 2017

Enbridge’s (Spectra’s) “AIM Project”
Dominion: “New Market Project”

Enbridge: “AIM Project”

Enbridge: “Atlantic Bridge Project” [partial]

National Fuel Gas: “Line D Project”

PNGTS: “C2C Project”

Tennessee: “Susquehanna West Project”

Tennessee: “CT Expansion”

Transco: “New York Bay Expansion”

Transco: “Garden State Expansion Project” [partial]
Projects Entering Service in New England Over Last Year

Enbridge: “AIM Project”: 342 MMcf/d

Enbridge: “Atlantic Bridge Project” [partial]: 40 MMcf/d

PNGTS: “C2C Project”: 32 MMcf/d

Tennessee: “CT Expansion”: 71 MMcf/d

Nearly half a billion cubic feet per day of new pipeline capacity added in region in last year
Project Review in New Jersey:
Some Recent Examples

*Pinelands Commission approved, Feb. 2017:*
South Jersey Gas’s Cape Atlantic Reliability Project

*Pinelands Commission approved, Sept. 2017:*
New Jersey Natural Gas’s Southern Reliability Link Project
Project Review in New York: Some Recent Examples

Delayed DEC review but recently completed:
Dominion’s New Market Project

Granted DEC certificates:
Millennium’s Eastern System Upgrade
Enbridge’s Atlantic Bridge Project

Denied DEC certificates, being challenged by project developers:
Williams’ Constitution Pipeline
National Fuel Gas Supply’s Northern Access Project

FERC determined DEC had waived authority by its delay to act on the application:
Millennium’s Valley Lateral Project
Regulatory & Environmental Issues
Delays & Siting Challenges at State & Local Levels

Federal approval process remains consistent, but region is seeing increasing delays at state (and local) level regarding final environmental permitting.

A more challenging regulatory environment for new project development. Extended timelines – added costs.

Local opposition to projects on the rise – and not just to natural gas.
Methane emissions from natural gas systems in MA have declined by 67% since 1990, according to MA DEP’s recent GHG inventory report. Natural gas sector in MA = 1.1% of total state GHG emissions (it was 2.6% in 1990).
Questions?