

# **Iroquois Gas Transmission System, L.P.**

*Presentation to the  
Connecticut DEEP  
2012 EDC Integrated Resource Plan*

*Iroquois' Role in  
Meeting the Future Natural Gas needs  
for Connecticut*

**September 20, 2011**

# Forward-Looking Statement Disclaimer

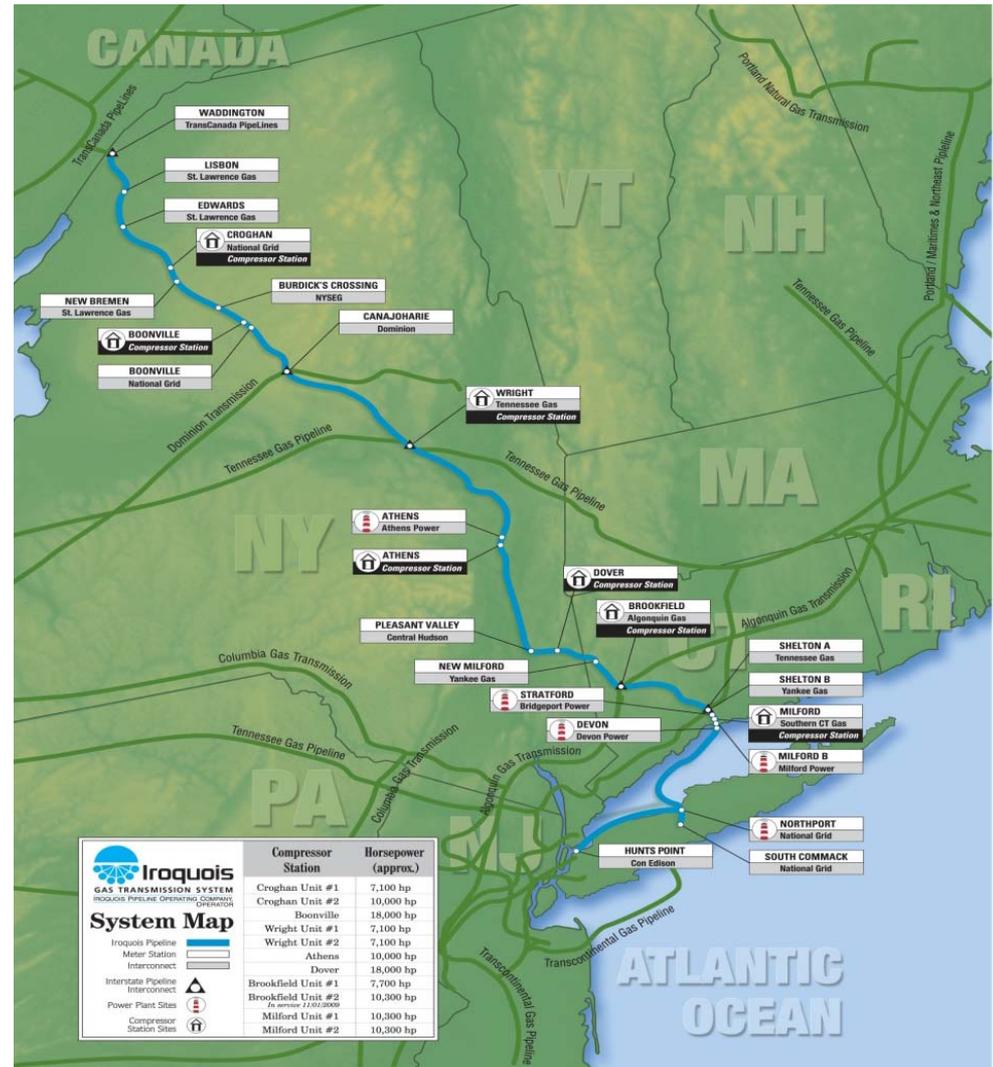
This publication may contain various forward-looking statements. Such forward-looking statements are based on current expectations, are not guarantees of future performance and include assumptions about future market conditions, operations and results. Iroquois can give no assurance that such expectations will be achieved. Among the many factors that could cause actual results to differ materially from those in the forward-looking statements herein are: future demand and prices for natural gas; availability of supplies of Canadian natural gas; regulatory, political, legislative and judicial developments, particularly with regard to regulation by the Federal Energy Regulatory Commission; the timing and cost of Iroquois' expansion projects; competitive conditions in the marketplace; changes in the receptivity of the financial markets to Iroquois or other oil and gas credits similar to Iroquois and, accordingly, our strategy for financing any such change in business strategy or expansions.

# Iroquois Gas Transmission System

- AGENDA
  - Iroquois Overview
  - Supply Drivers (Shale, LNG, Power plant development)
  - New Projects

# Iroquois Gas Transmission System

- Commenced operations in 1991
- 416-mile (30" and 24") pipeline system running from the Canadian border at Waddington, NY to Long Island, NY and New York City, NY
- 106,400 HP of compression (7 stations)
- 1.5 Bcf/d total system capacity (physical receipt capability: Waddington = 1.2 Bcf/d, Brookfield = 0.3 Bcf/d)
- Interconnects with DTI, TGP (200/300 lines) and AGT
- Maximum Allowable Operating Pressure = 1,440 psig

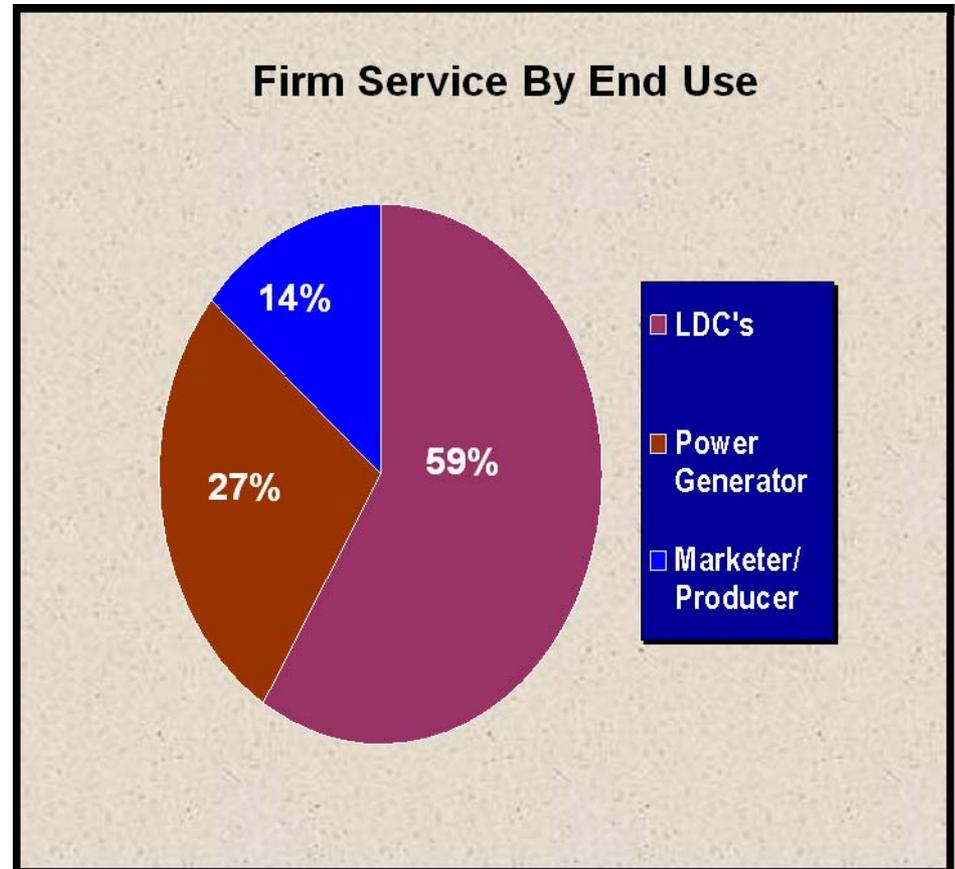


# Ownership Structure

TransCanada Pipelines Limited	44.48%
Dominion Resources, Inc.	24.72%
National Grid U.S.	20.40%
New Jersey Resources	5.53%
Energy East Corp.	4.87%
	<hr/>
	100.0%

# Iroquois Firm Transportation Shipper Mix

- Through active marketing and inexpensive expandability, Iroquois continues to grow, and in doing so, has diversified its customer base. In 1992, the customer base was predominately LDC's. As of 2009 the LDC component is approximately 59%.
- The addition of electric plant load continues to be a positive for the system as a whole :
  - provides a load leveling effect in summer
  - balances traditional utility market needs



# Major Firm Shippers

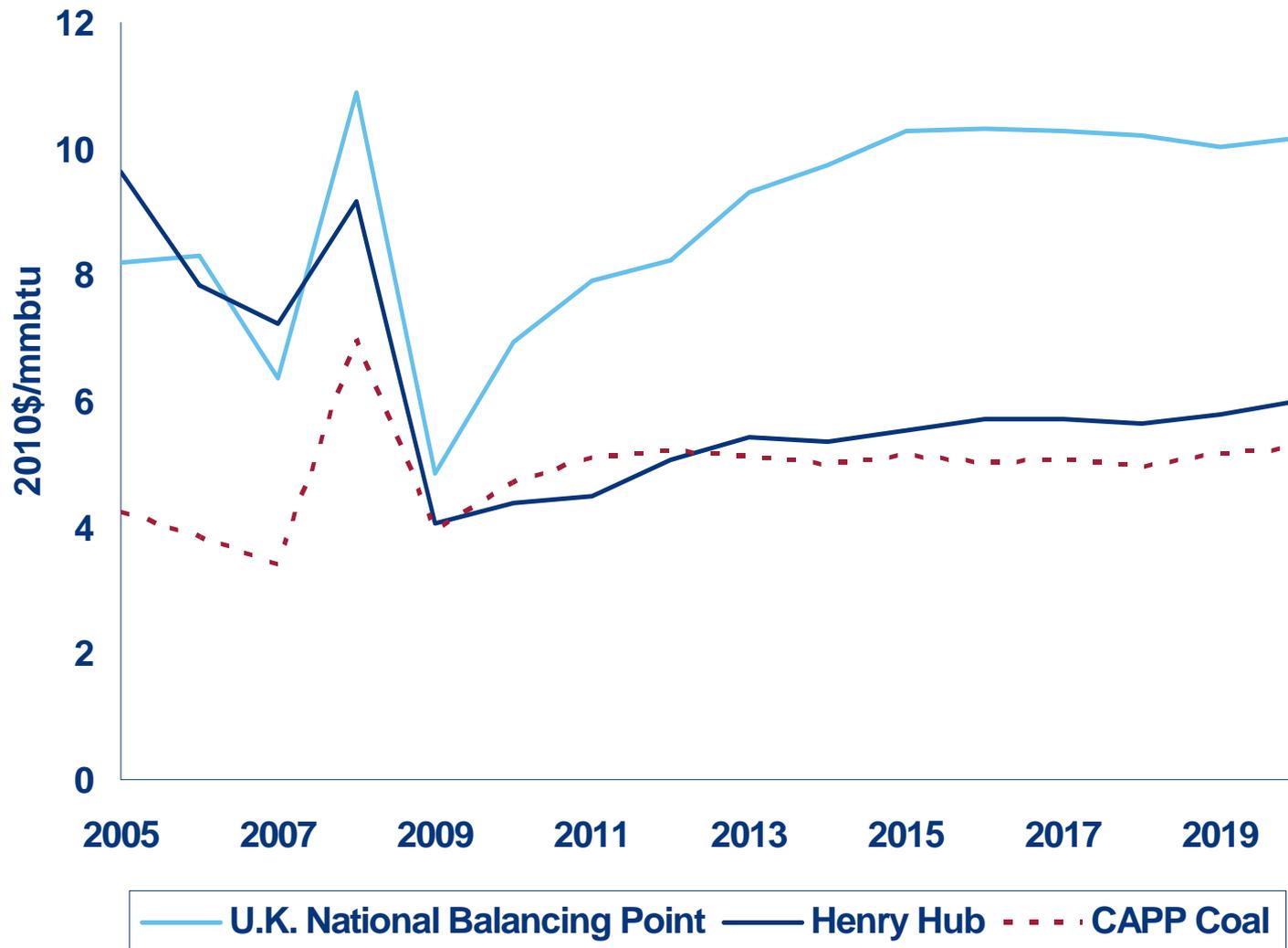
- LDC's
  - National Grid US 474 MDt/d
  - Con Edison 150 MDt/d
  - Connecticut Natural/Southern CT Gas 92 MDt/d
  - Yankee Gas 73 MDt/d
- IPP/Power Generators
  - Bridgeport Energy 94 MDt/d
  - Selkirk 77 MDt/d
  - New Athens Generating 70 MDt/d
  - TC Ravenswood 60 MDt/d
  - Milford Power 35 MDt/d

# Iroquois Zone 2 Power Generation Markets

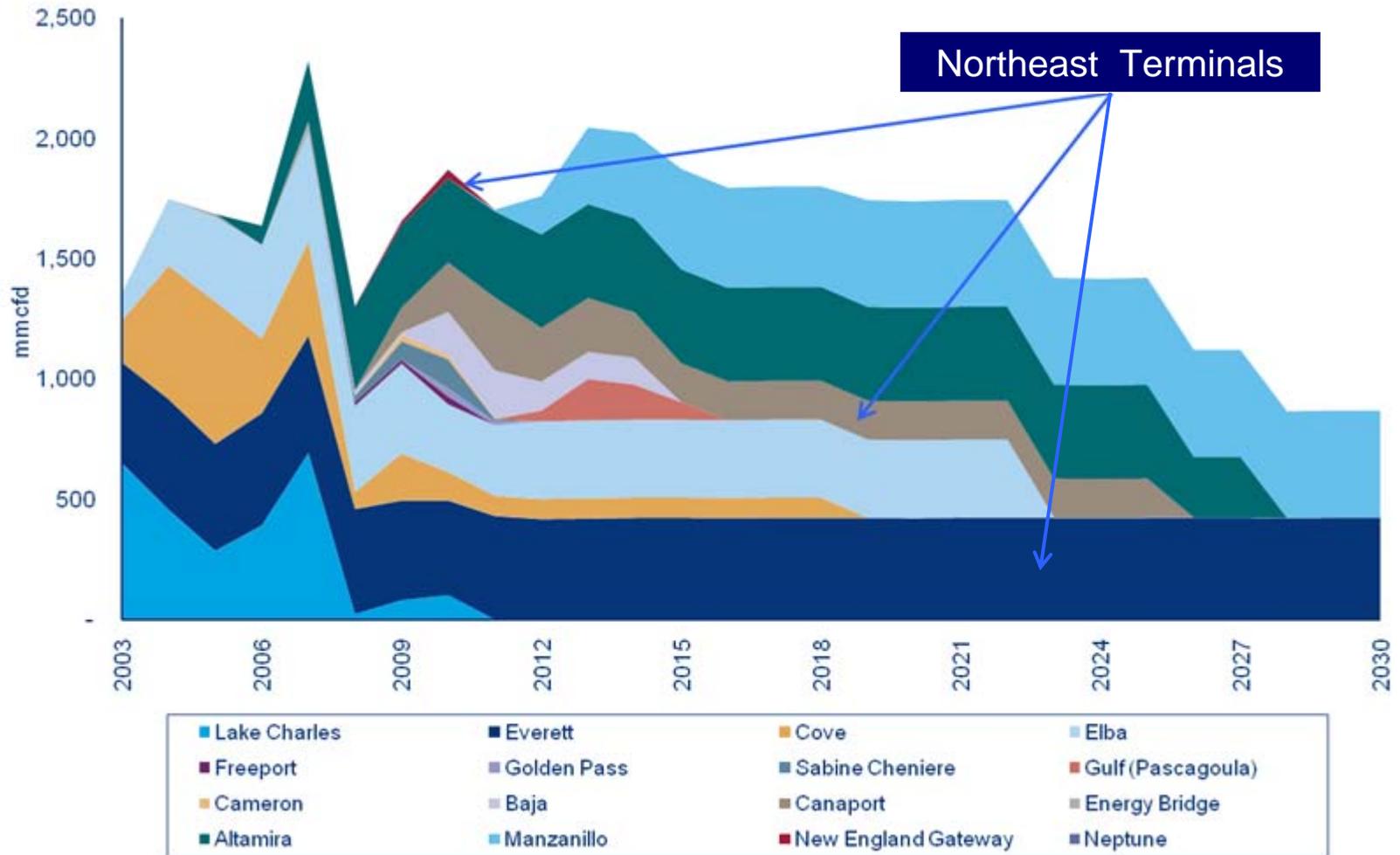
<b>Generator</b>	<b>MW</b>	<b>Peak Load (Dth/d)</b>	<b>Firm Supply (Dth/d)</b>
Athens Generating	1,080	180,000	70,000
Cricket Hill (Proposed)	1,000	168,000	0
Milford Power	540	96,000	35,000
Bridgeport Energy	520	94,000	20,000
Northport	1,582	270,000	0
NRG Power	600	145,000	0
<b>Total</b>	<b>5,322</b>	<b>953,000</b>	<b>125,000</b>

# Supply Drivers

# Economics Do Not Support Delivery of LNG to NE

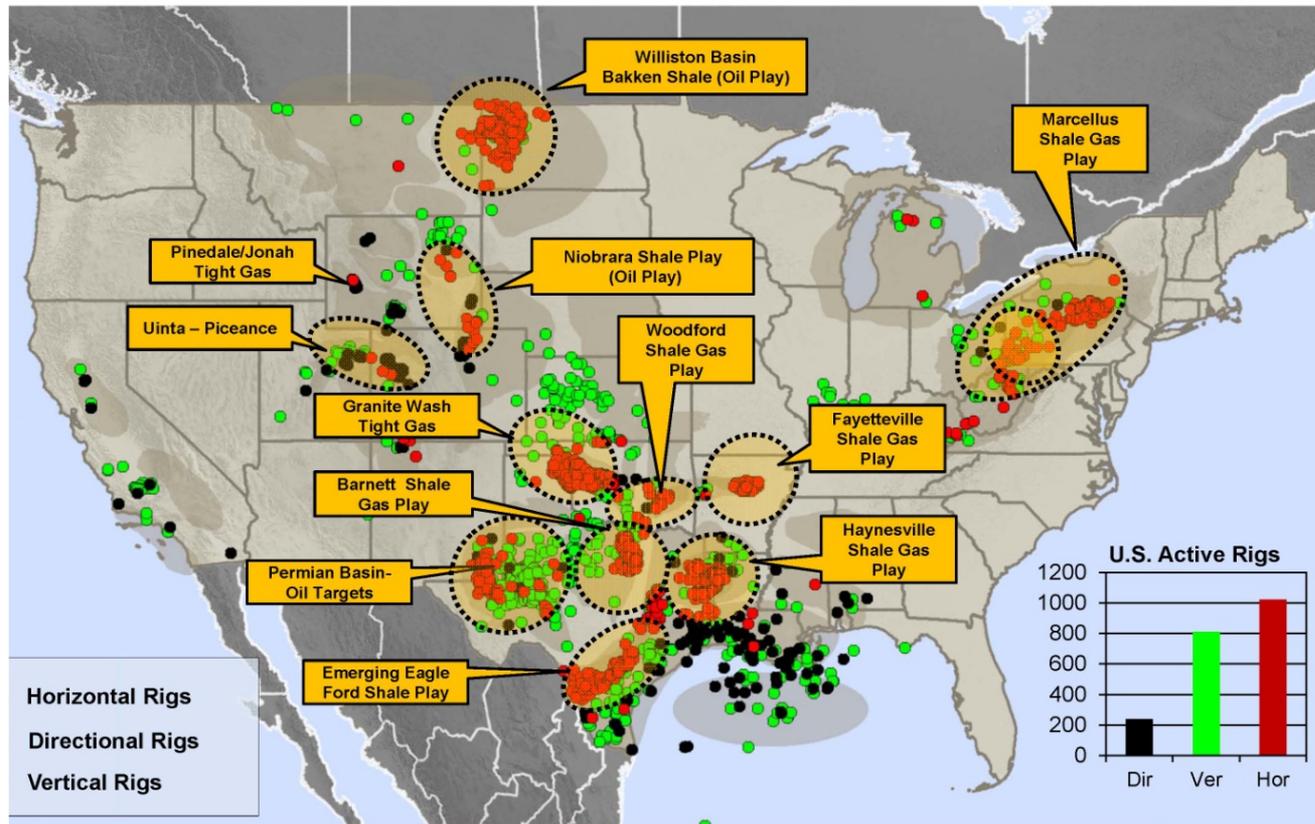


# Annual LNG Imports By Facility



# Where Are Producers Deploying Their Capital?

## U.S. Active Rig Locations



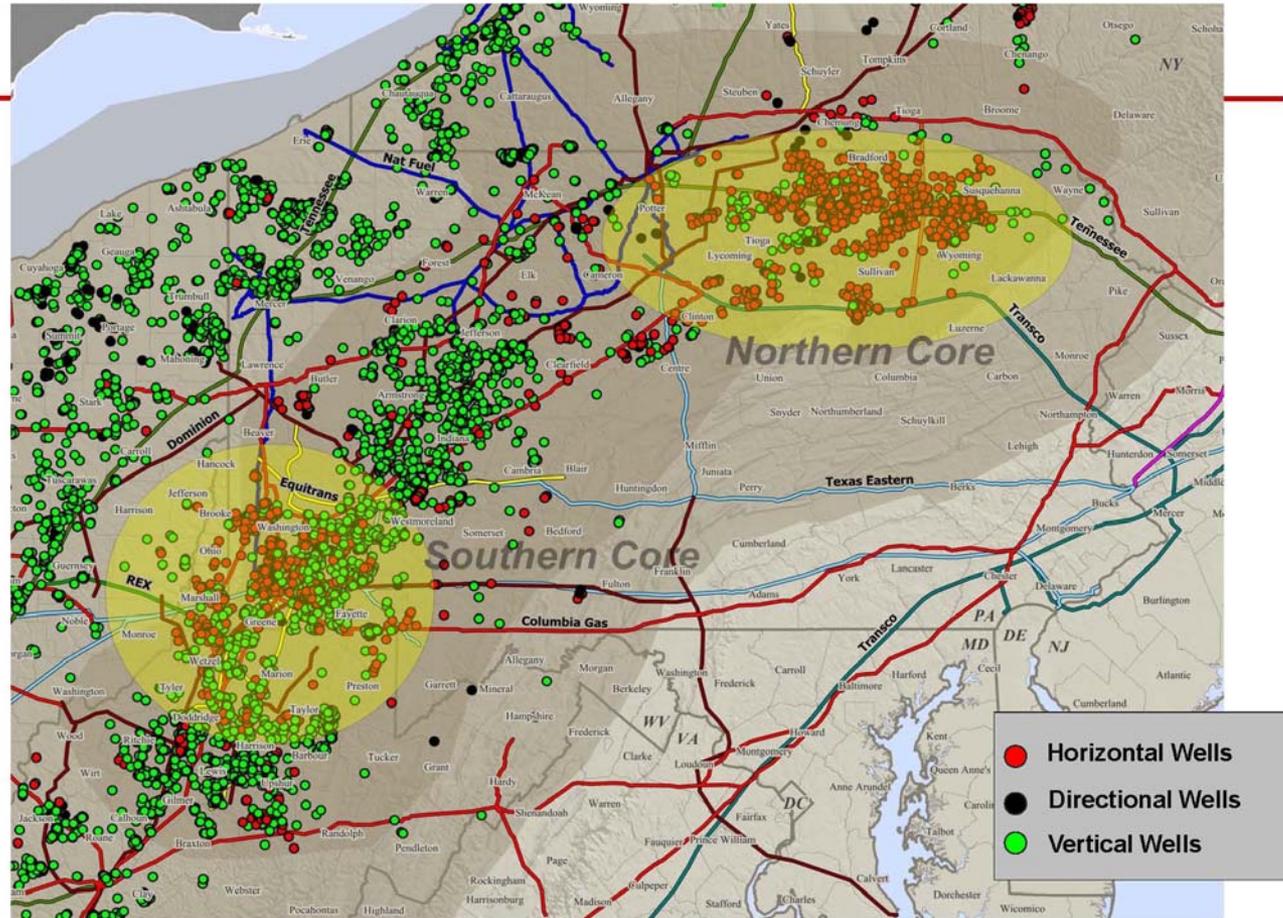
BENTEKENERGY.COM

Source RigData and BENTEK: Lower 48 States, April 2011

# The Marcellus Picture



## Marcellus Shale Region Wells Drilled 2008 – 2011

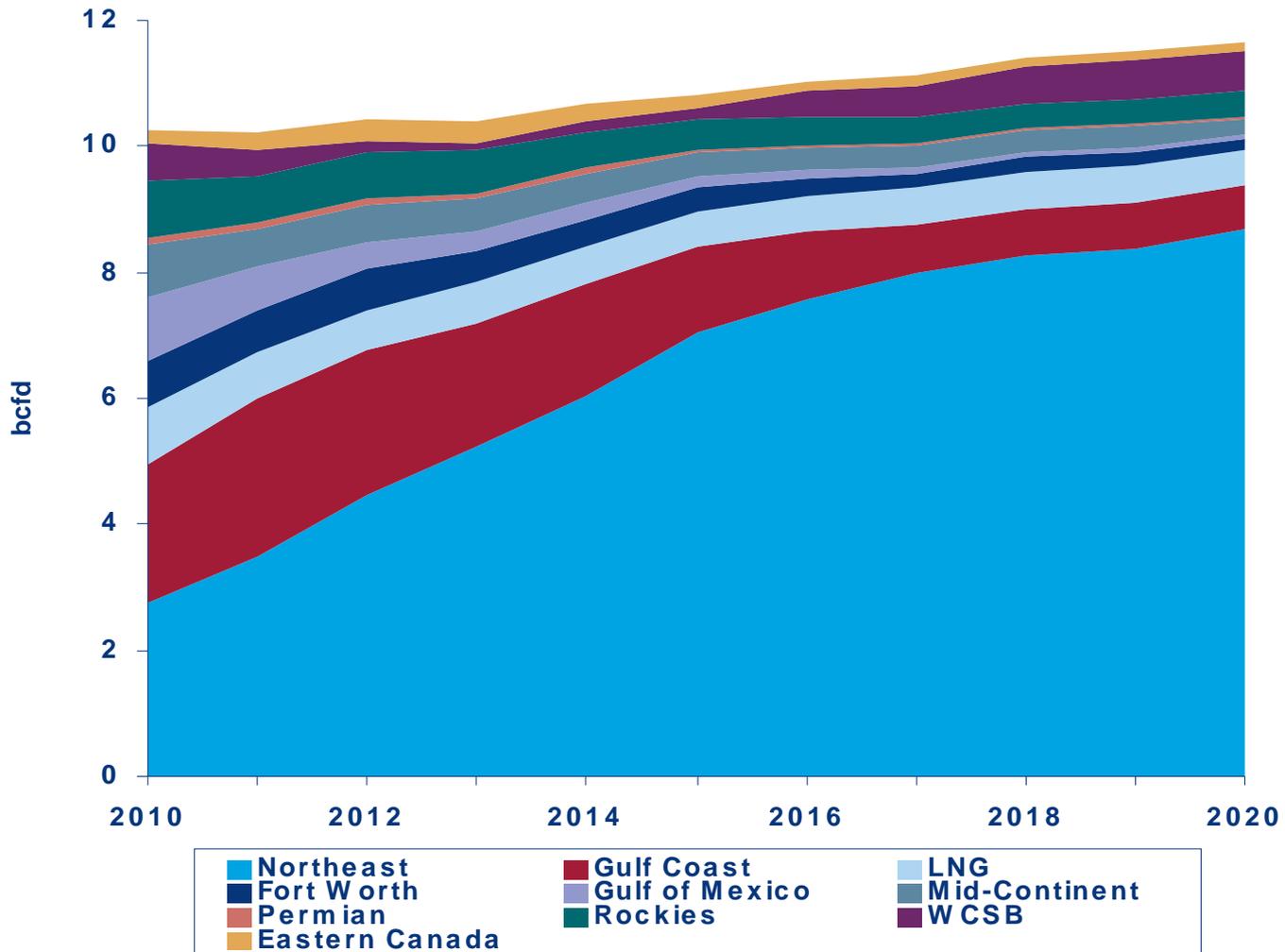


BENTEKENERGY.COM

Source RigData and BENTEK, April 2011

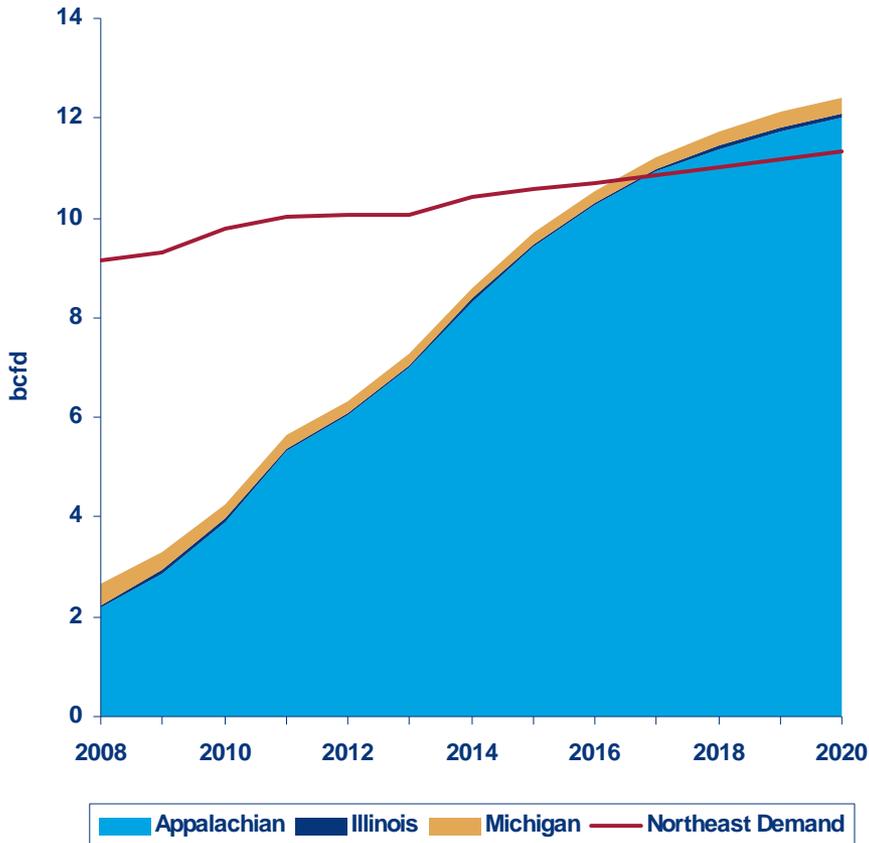
# The Impact of Marcellus

## Northeast Supply Mix

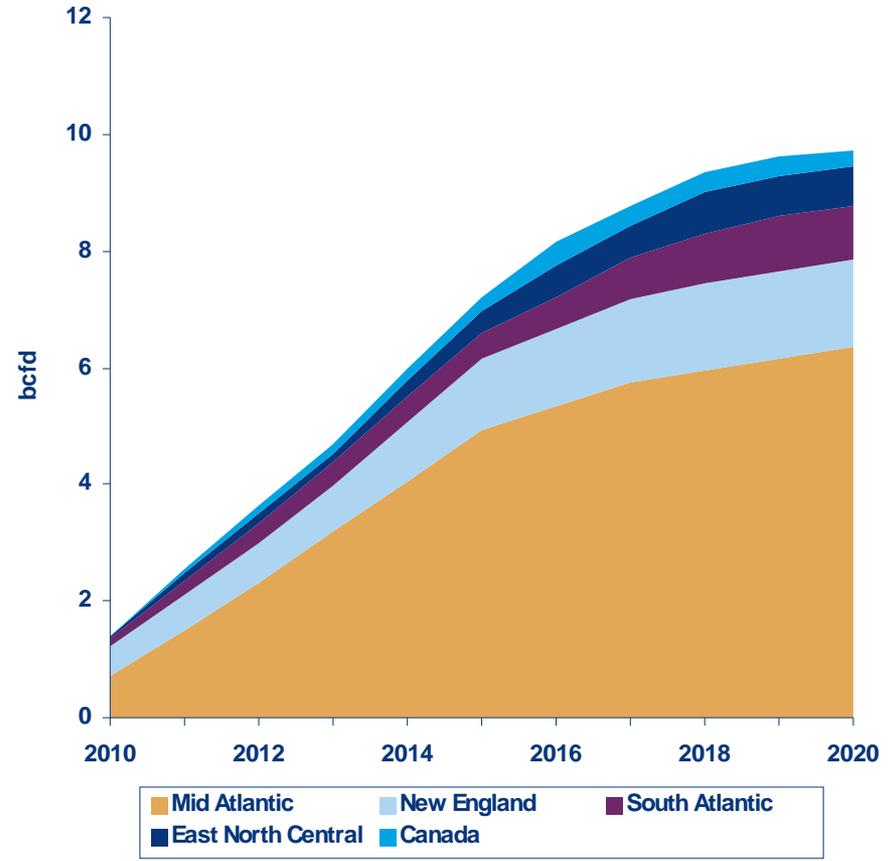


# Marcellus Becomes Major Supplier to NE

## Northeast Supply vs. Total Demand

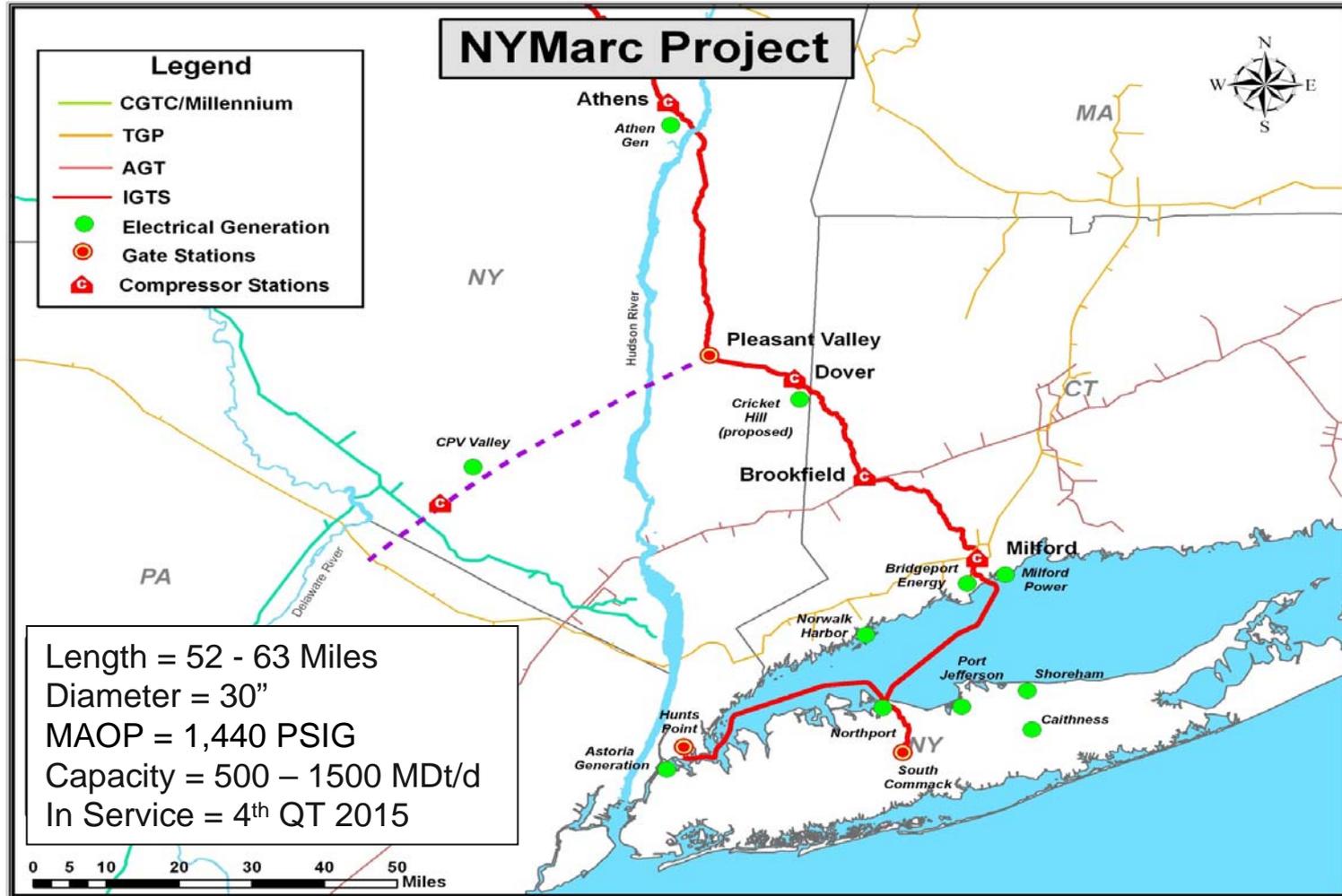


## Marcellus Destination Mix

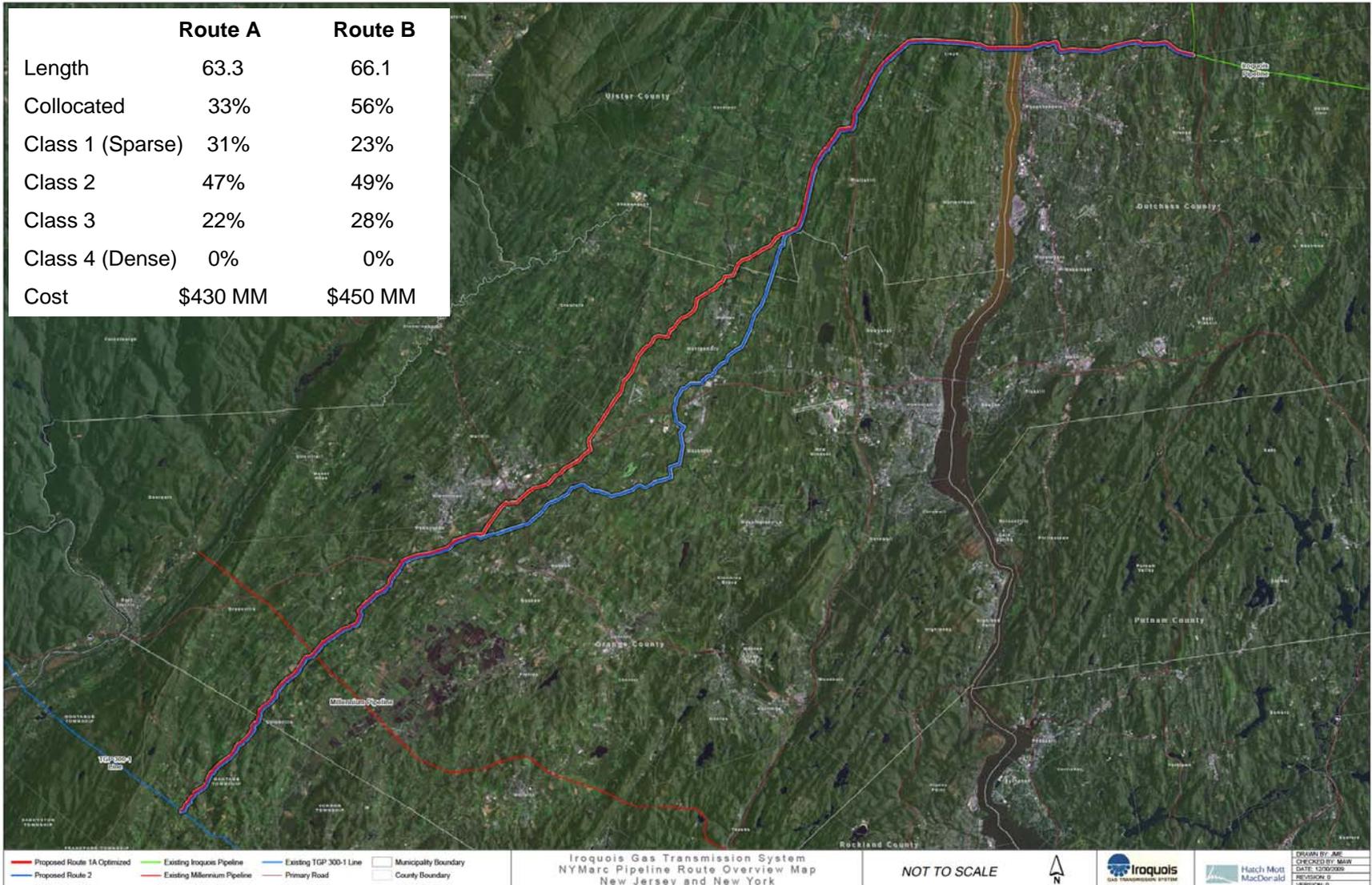


# **Iroquois Infrastructure Initiatives**

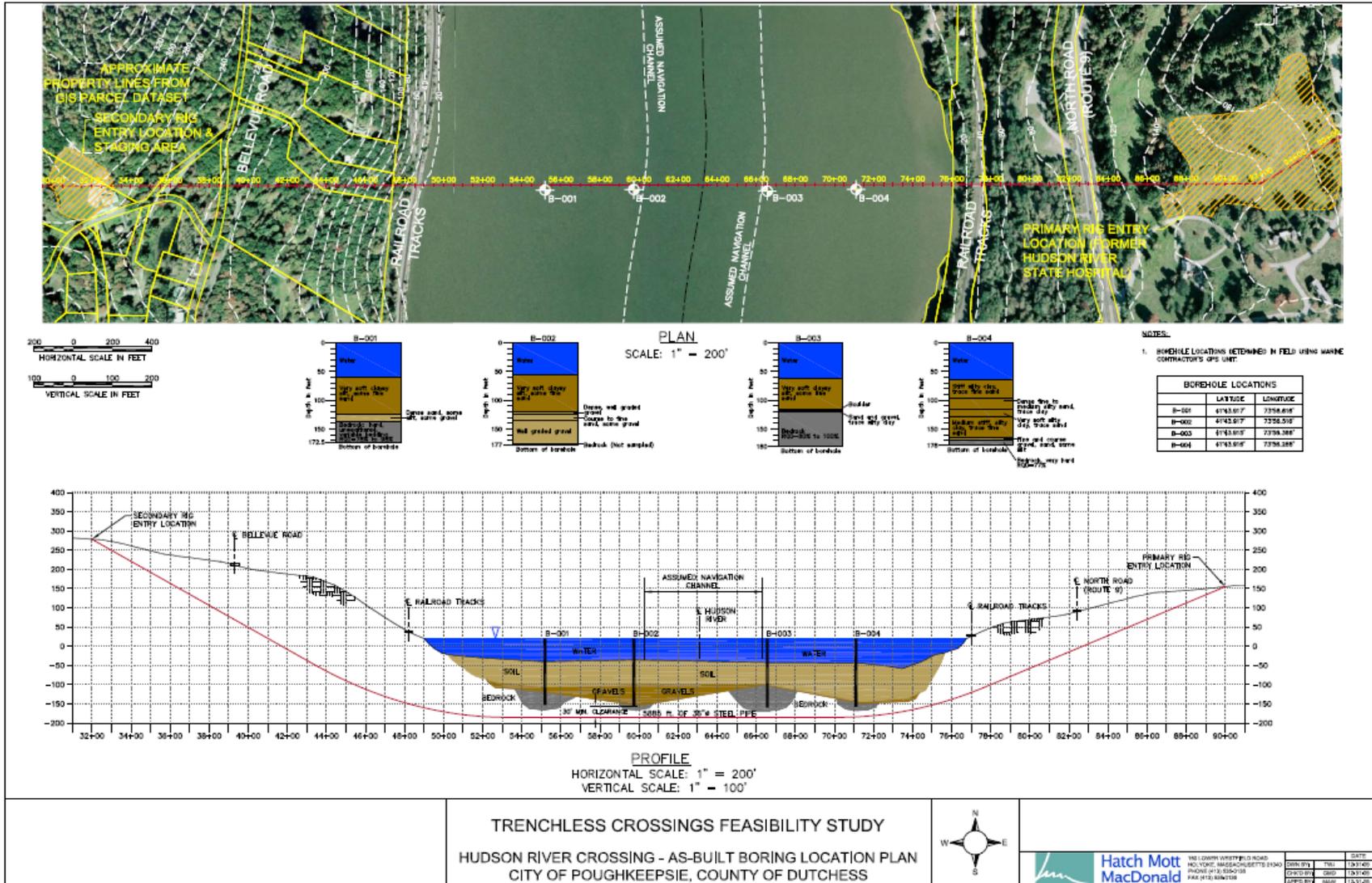
# NYMarc Project



# NYMarc Route Options



# Hudson River Crossing



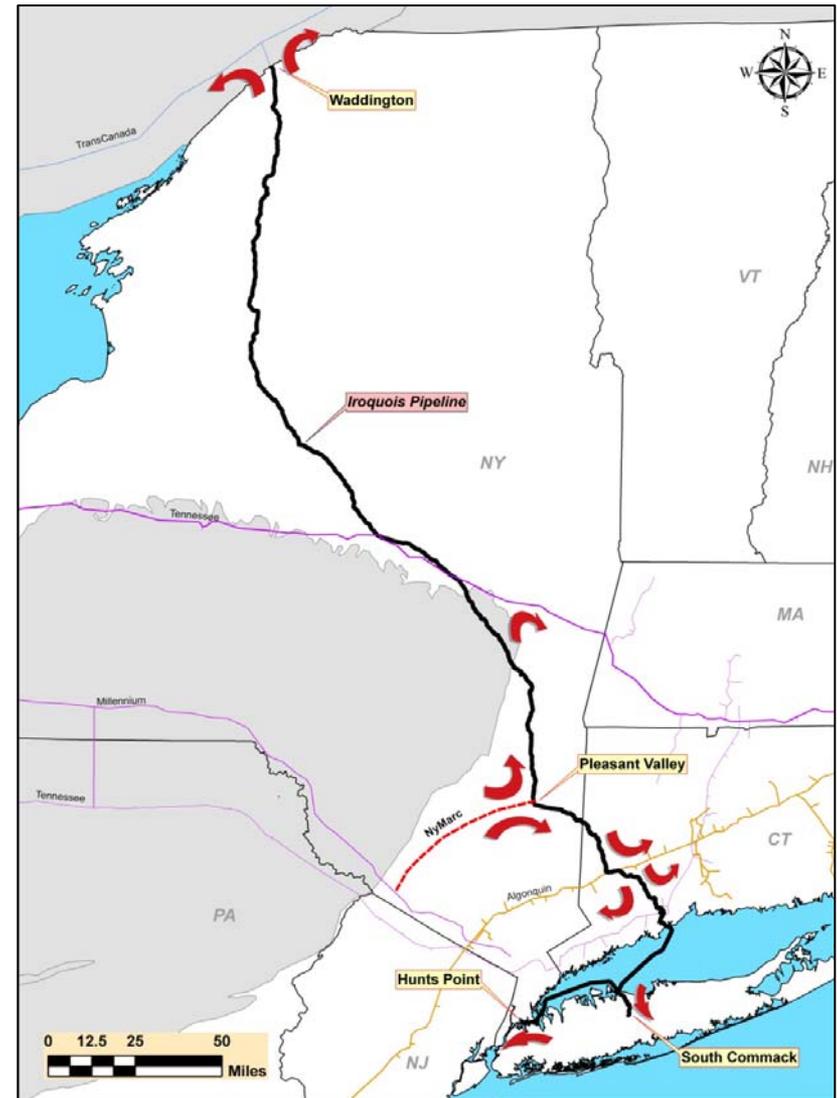
TRENCHLESS CROSSINGS FEASIBILITY STUDY  
HUDSON RIVER CROSSING - AS-BUILT BORING LOCATION PLAN  
CITY OF POUGHKEEPSIE, COUNTY OF DUTCHESS



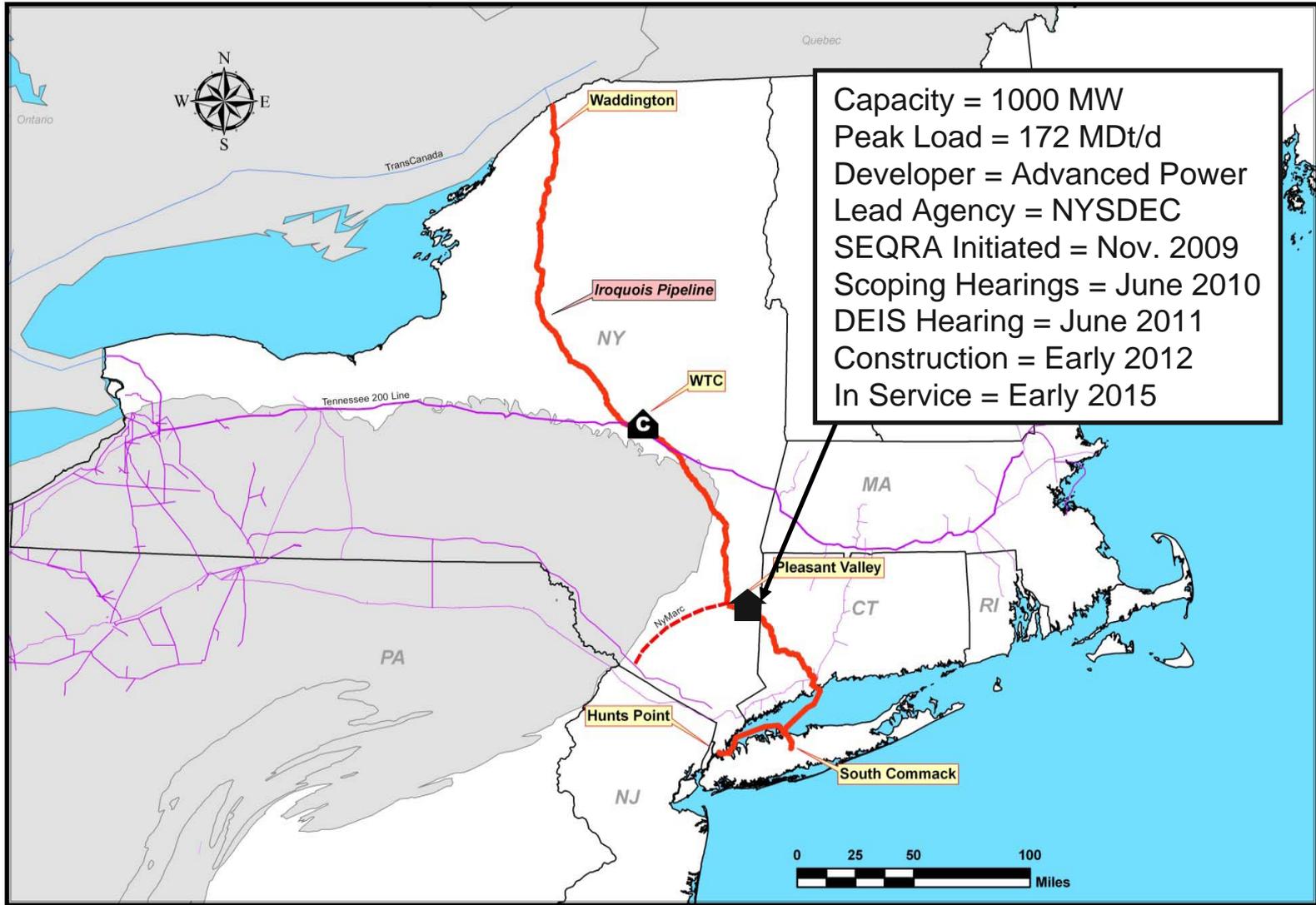
100 L. DOWN WHITEFIELD ROAD POUGHKEEPSIE, NEW YORK 12551 PHONE: 845.524.5100 FAX: 845.524.5100	DATE: 1/31/07 1/31/07 1/31/07 1/31/07
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# NYMarc Project Benefits

- Access to:
  - Premium basis markets
  - Economic Expandability
  - Under-supplied firm shippers (LDCs)
  - High capacity-factor generating facilities
  - “Back door” of the NYF System
    - National Grid/LIPA on Long Island (South Commack)
    - Con Edison/NYPA in the Bronx (Hunts Point)
  - Backhaul Markets:
    - Eastern Canadian markets (@ Waddington)
    - New England (via TGP 200 Line @ Wright)
- Permitting:
  - High probability of success:
    - Ease of construction
    - Lower congestion/population density along corridor
    - Viable Hudson River crossing



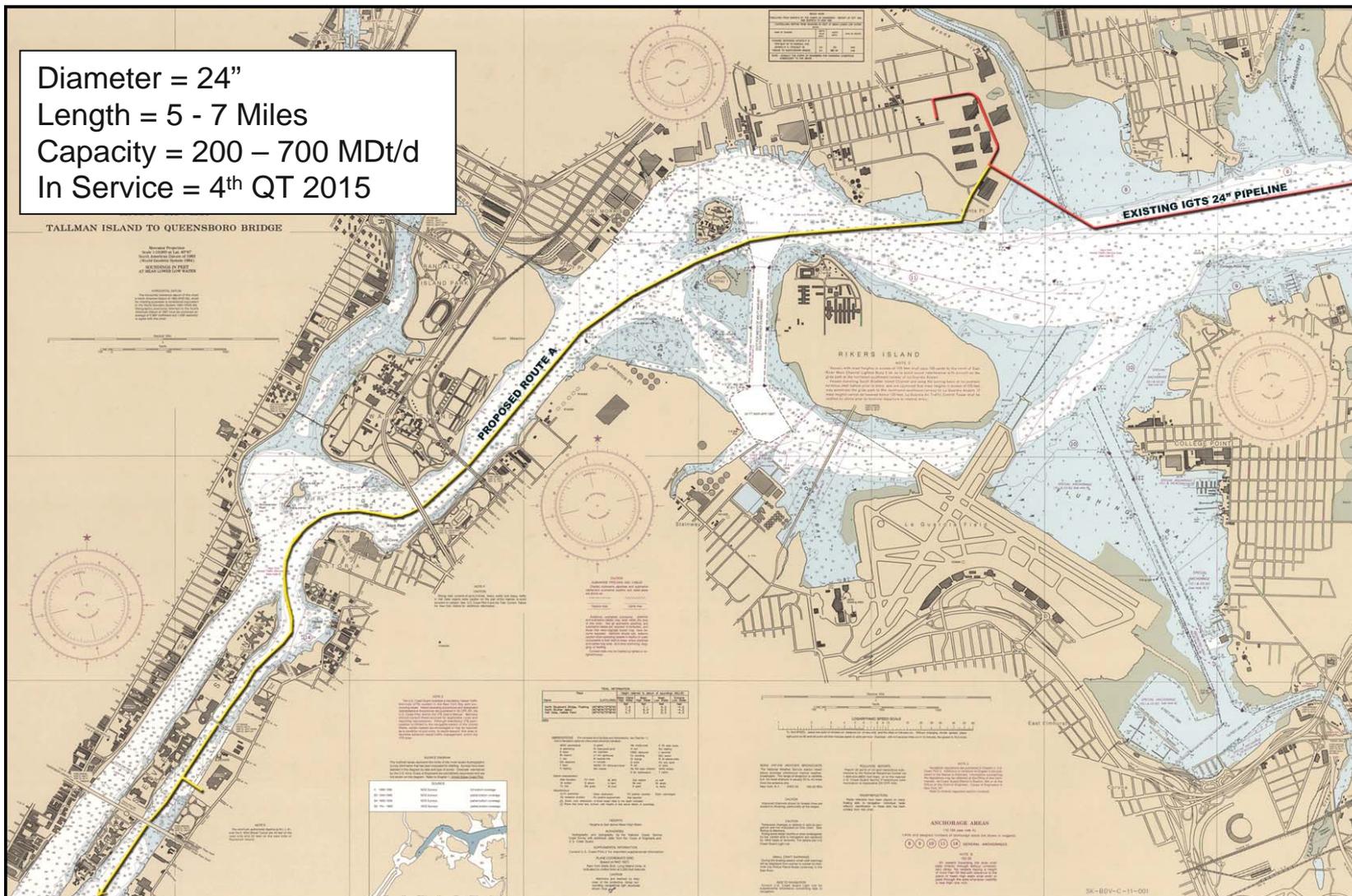
# Cricket Valley Energy



SKL/VP/J.A./10/06

# East River Extension

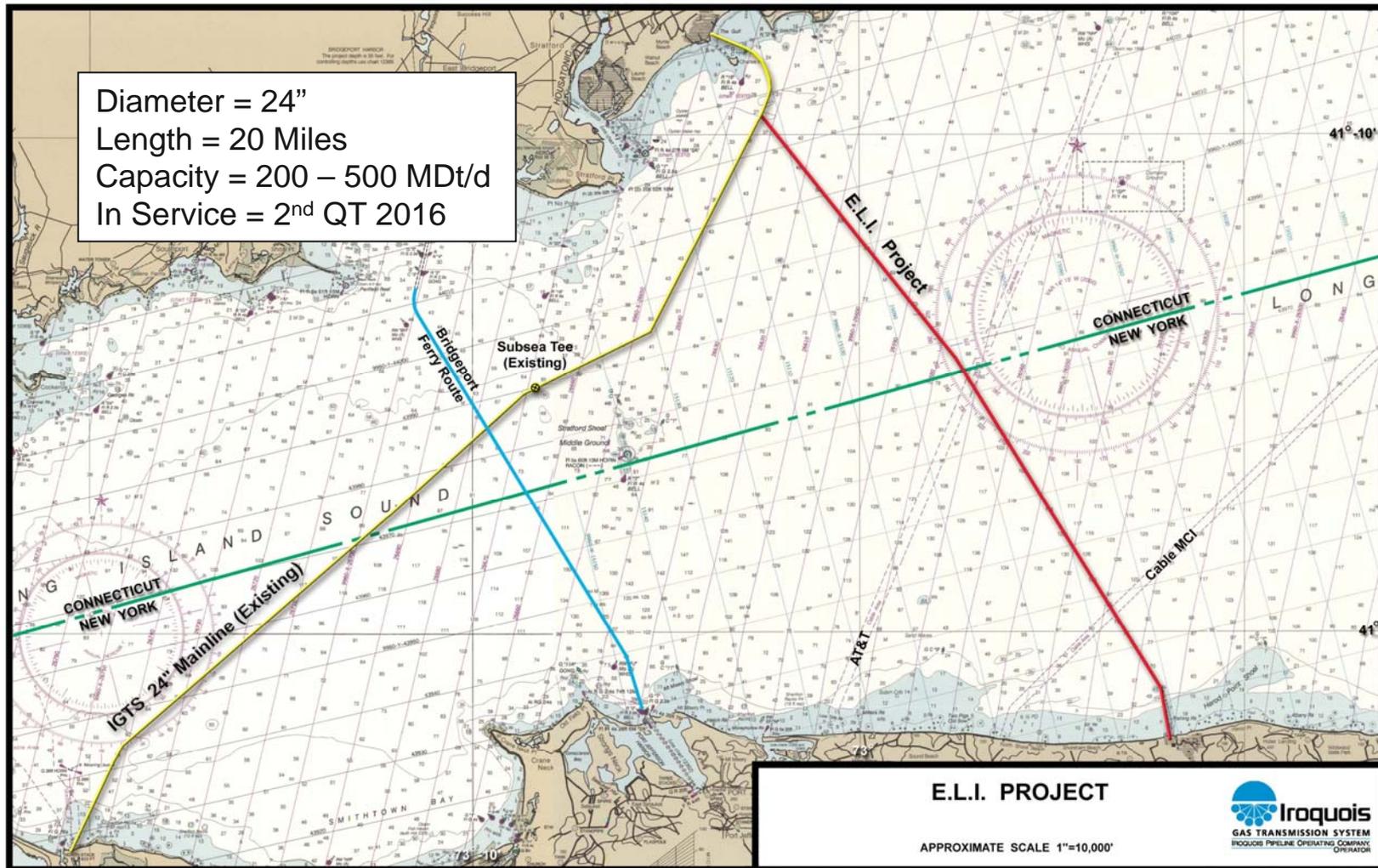
Diameter = 24"  
Length = 5 - 7 Miles  
Capacity = 200 – 700 MDt/d  
In Service = 4<sup>th</sup> QT 2015



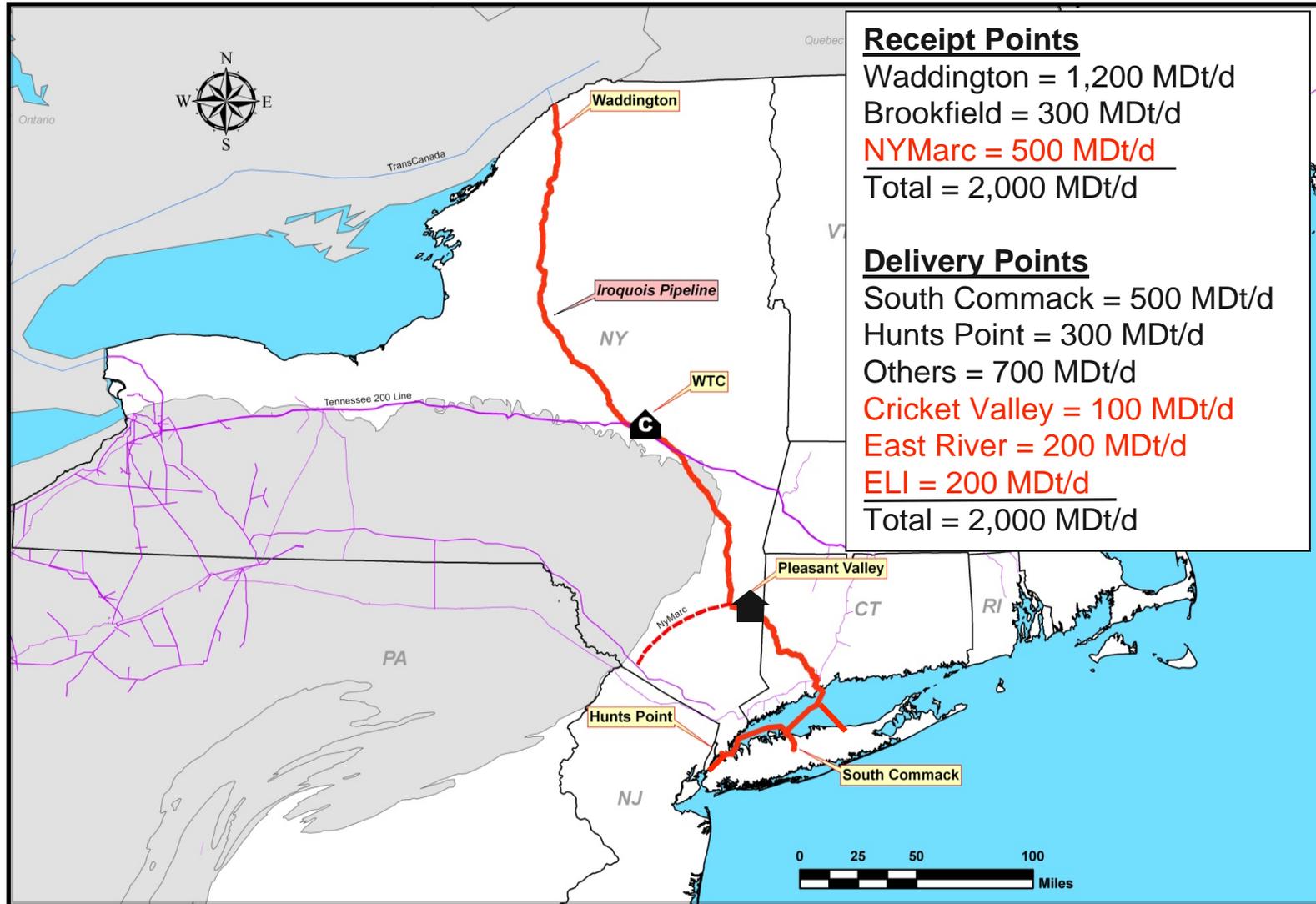
# Potential East River Generation Markets

Generator	MW	Peak Load (Dth/d)
NYPA - Astoria	525	90,000
Astoria Energy	622	90,000
Astoria Energy II (In-Service 2 <sup>nd</sup> QT 2011)	740	115,000
Astoria Generating	1,314	315,000
NrG Power (Retiring)	600	145,000
NrG Power (Permitted)	1,040	170,000
TC Power Ravenswood	2,480	500,000
ConEdison East River	360	55,000
<b>Total</b>	<b>7,101</b>	<b>1,480,000</b>

# Eastern Long Island (“ELI”) Project (LIPA RFP)



# Iroquois 2016



SK-BVD-4-10-05

