

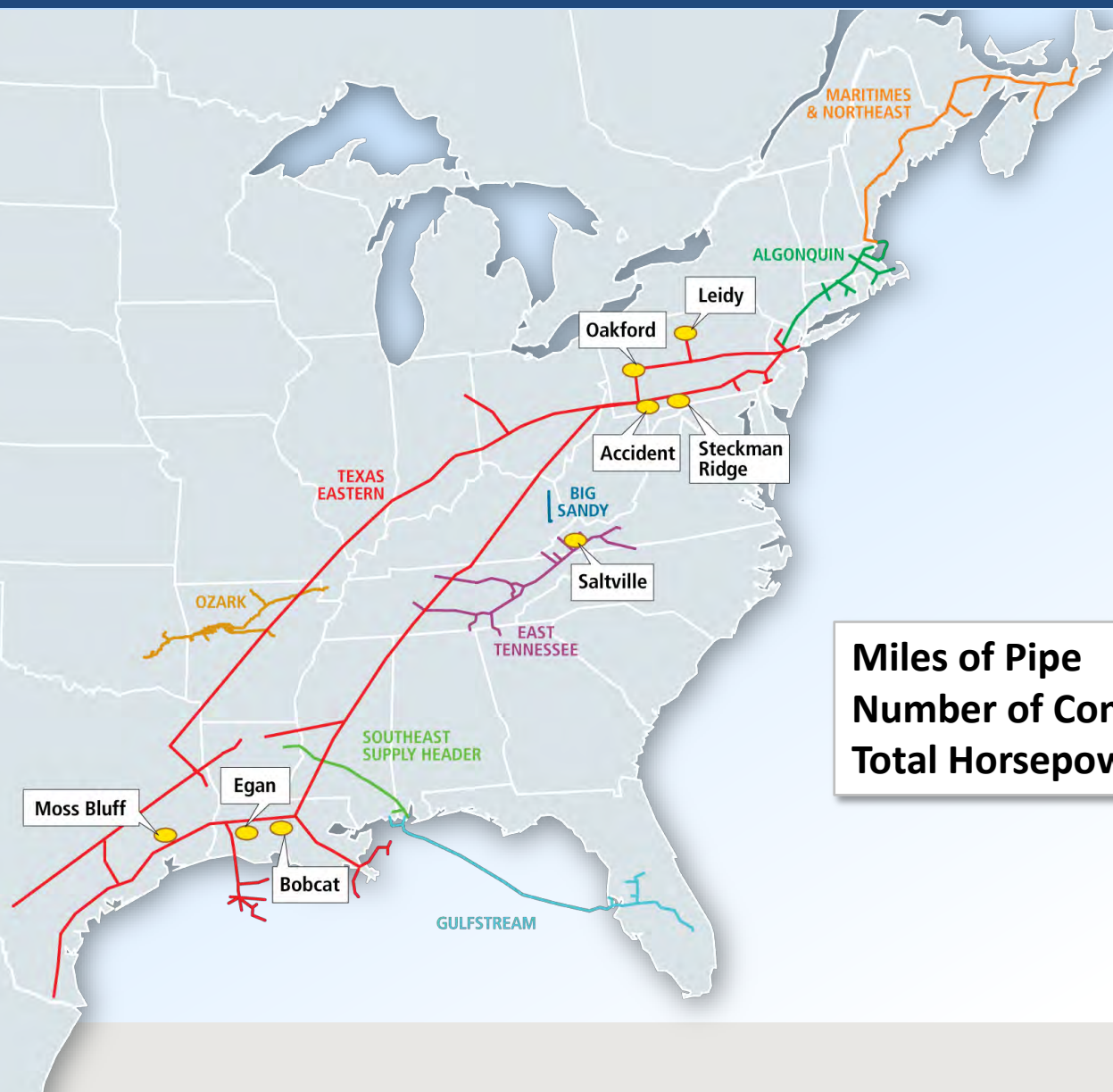


*Association of Energy Engineers*  
*January 9, 2013*

Michael Dirrane  
Director, Northeast Marketing



# Spectra Energy U.S. Transmission Map

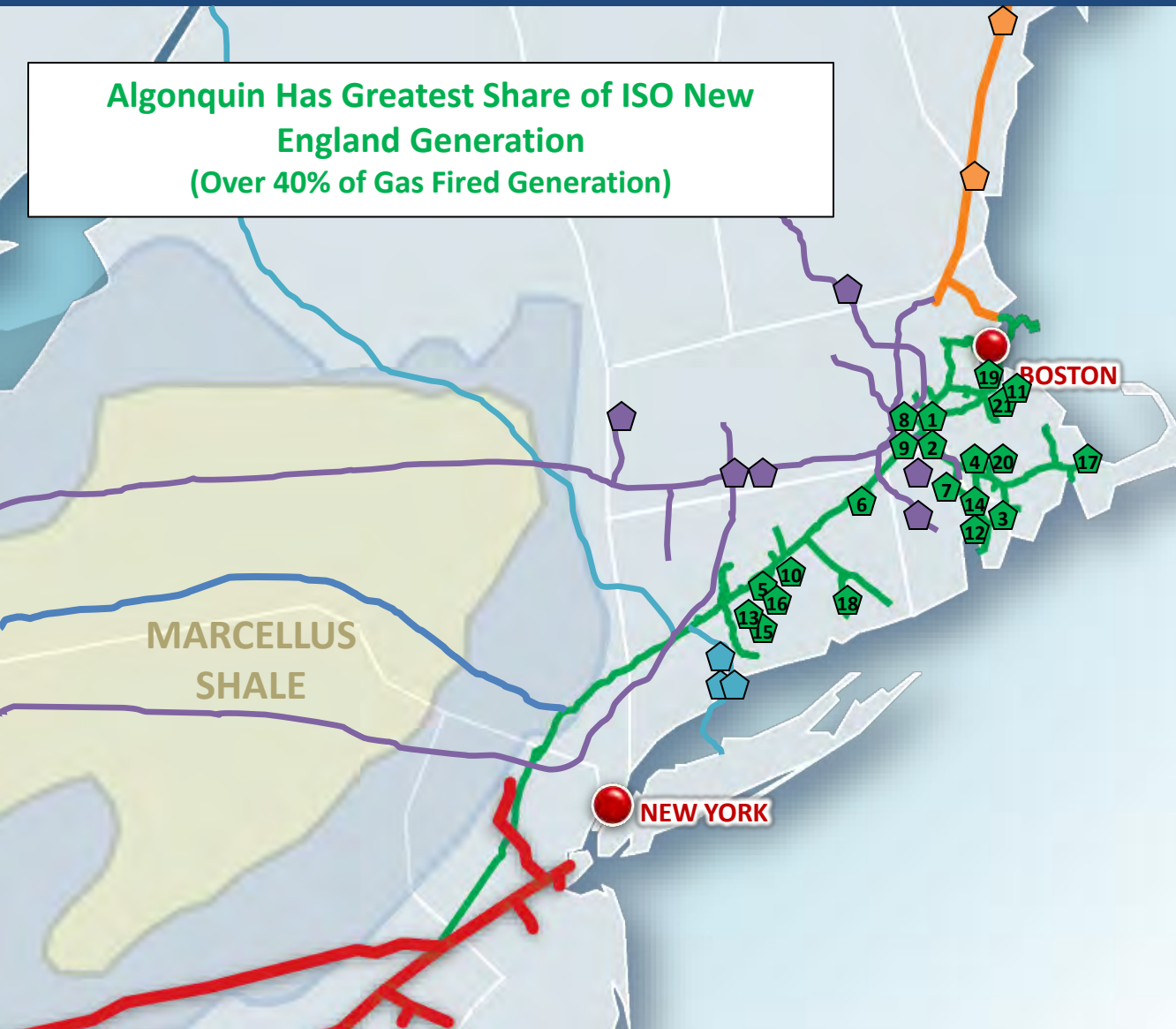


<b>Miles of Pipe</b>	<b>13,297</b>
<b>Number of Compressor Stations</b>	<b>129</b>
<b>Total Horsepower</b>	<b>2,147,488</b>

# Algonquin Pipeline – Critical Fuel Delivery System for ISO New England Power Plants



**Algonquin Has Greatest Share of ISO New England Generation  
(Over 40% of Gas Fired Generation)**

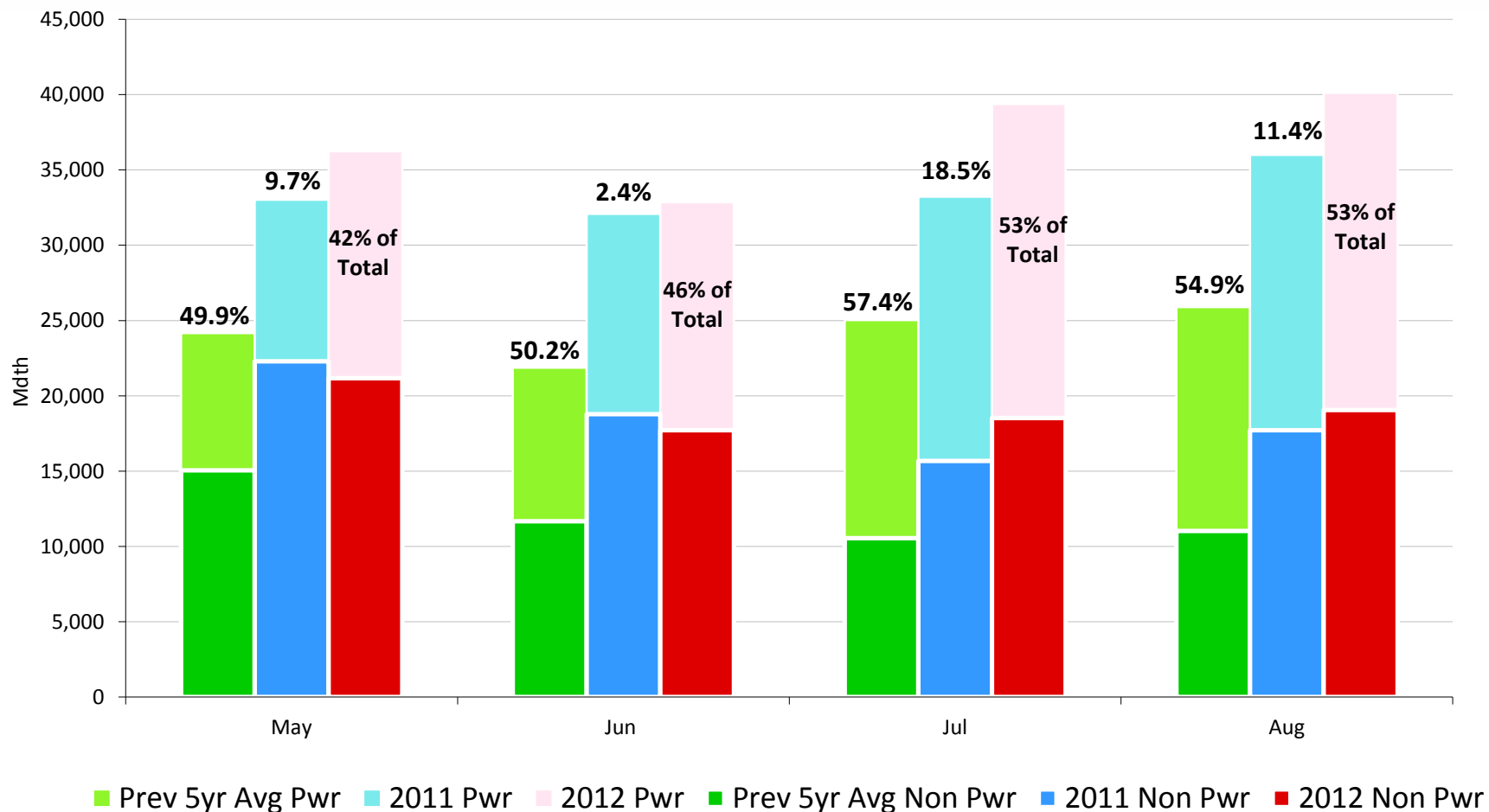


- Texas Eastern
- Algonquin
- Maritimes & NE
- Millennium
- Iroquois
- Tennessee Gas Pipeline

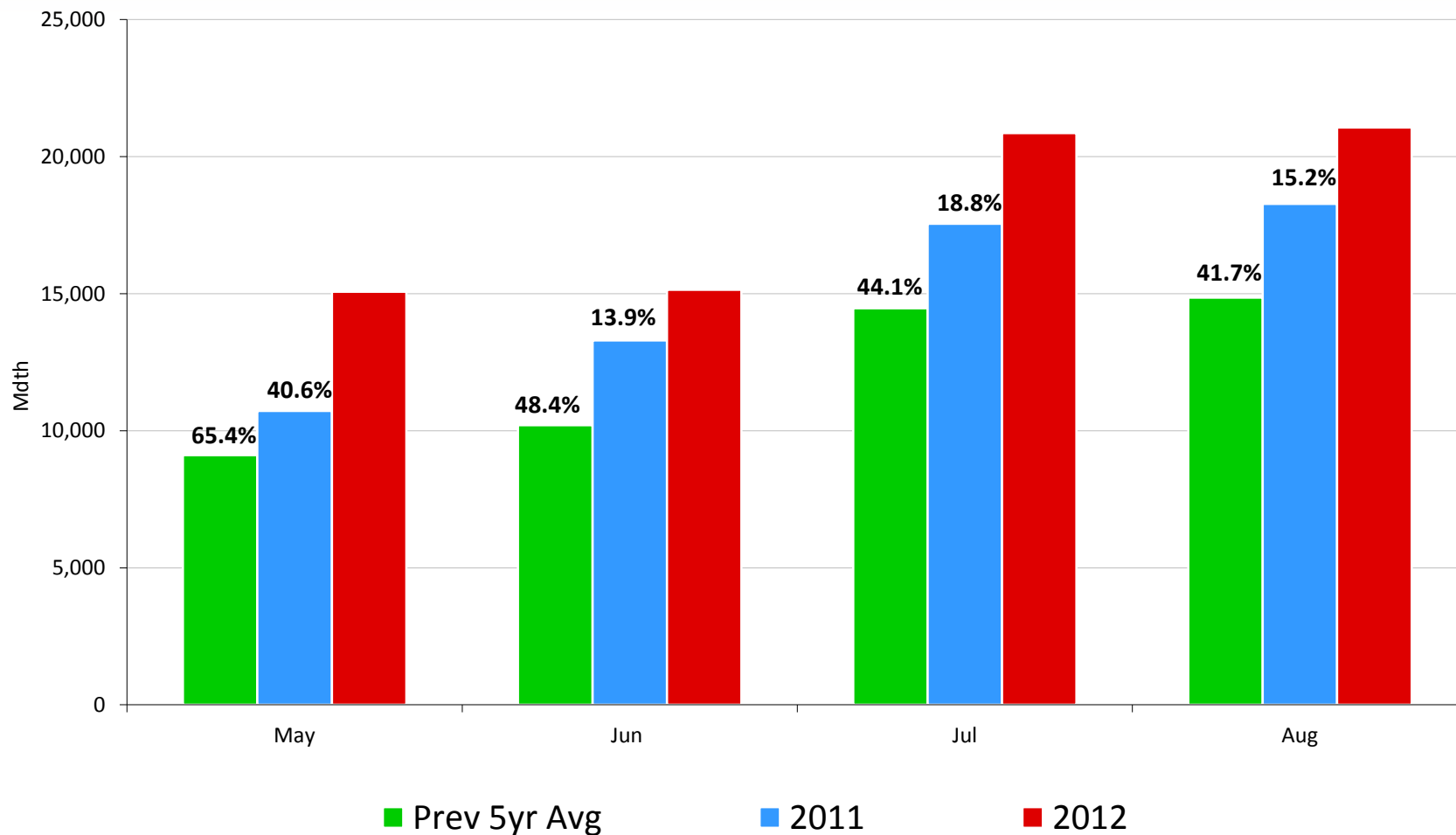
**Power Plants currently served by AGT**

#	Plant Name	(MW)	~ MDth/d
<b>Natural Gas Only</b>			
1	ANP Bellingham	523	105
2	Bellingham	337	67
3	Dartmouth Power	68	14
4	Dighton Power	177	35
5	Kleen Energy	620	124
6	Lake Road	564	113
7	Manchester Street	510	102
8	Milford Power	171	34
9	Ocean State Power	635	127
10	Genconn Power	197	39
11	Fore River	837	167
12	Tiverton	279	56
13	Wallingford Energy	241	48
<b>Total Natural Gas Only:</b>		<b>5,157</b>	<b>1,031</b>
<b>Natural Gas / Oil Cogeneration</b>			
14	Brayton Point	446	89
15	CMEEC - Pierce Power	96	19
16	Lake Road	281	56
17	Middletown	365	73
18	Mirant Canal	561	112
19	Montville	82	16
20	Potter Street (BELD I)	92	18
21	TMLP	110	22
22	Watson Generating (BELD II)	115	23
<b>Total Cogeneration:</b>		<b>2,148</b>	<b>430</b>
<b>Total Gas Only &amp; Cogeneration:</b>		<b>7,305</b>	<b>1,461</b>

# Algonquin Gas Transmission Monthly Deliveries

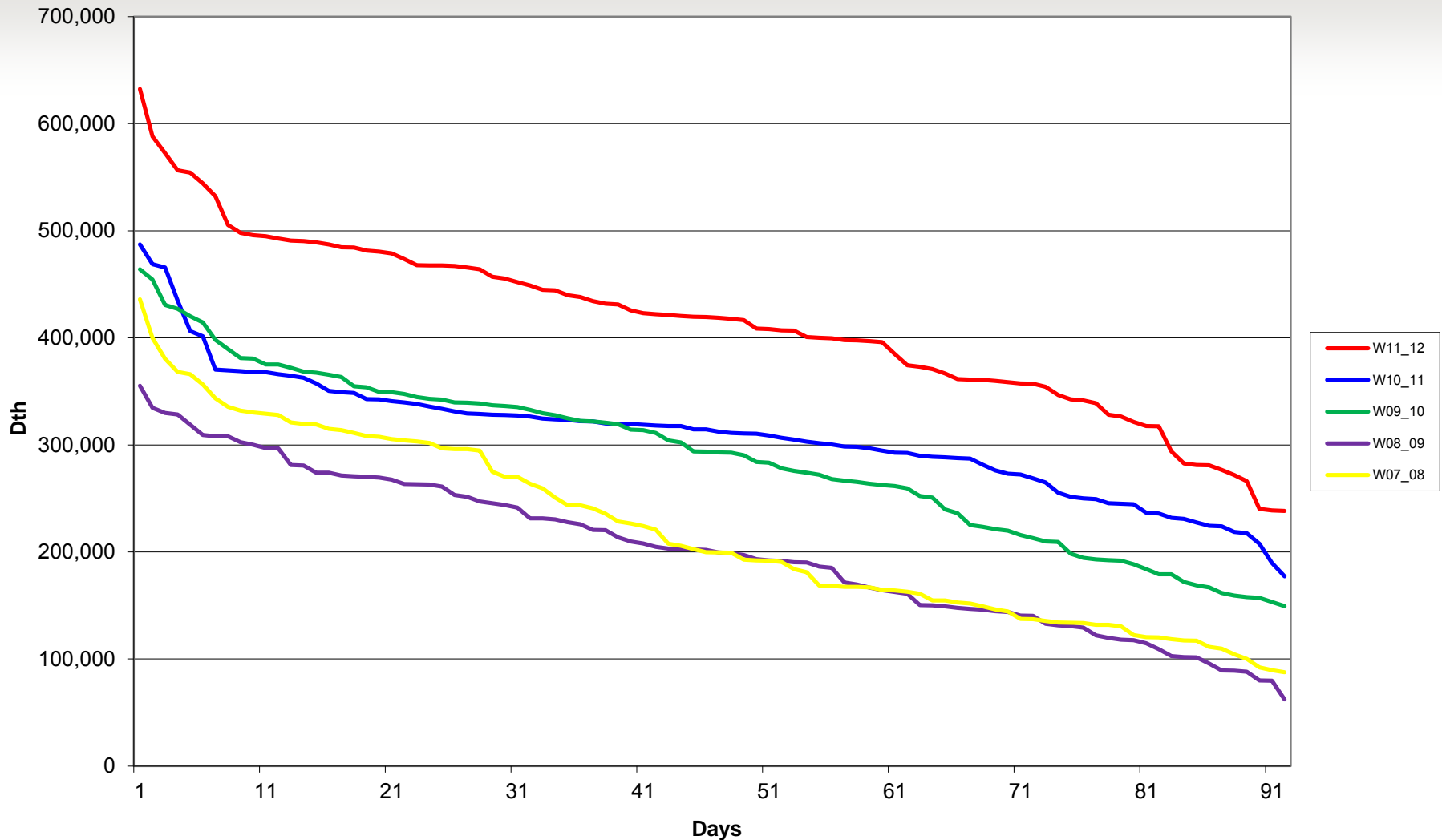


# Algonquin Gas Transmission Power Plant Monthly Deliveries

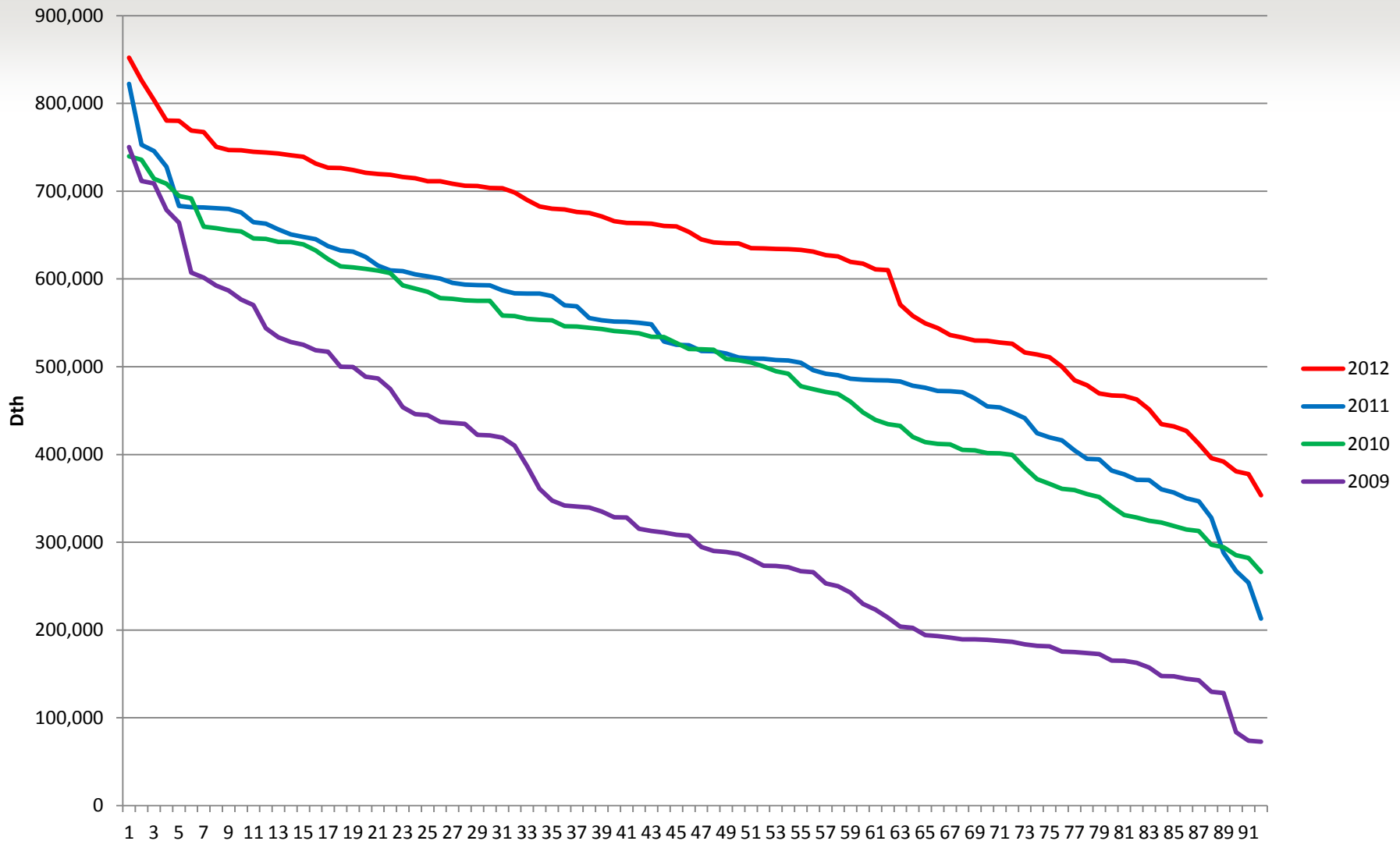




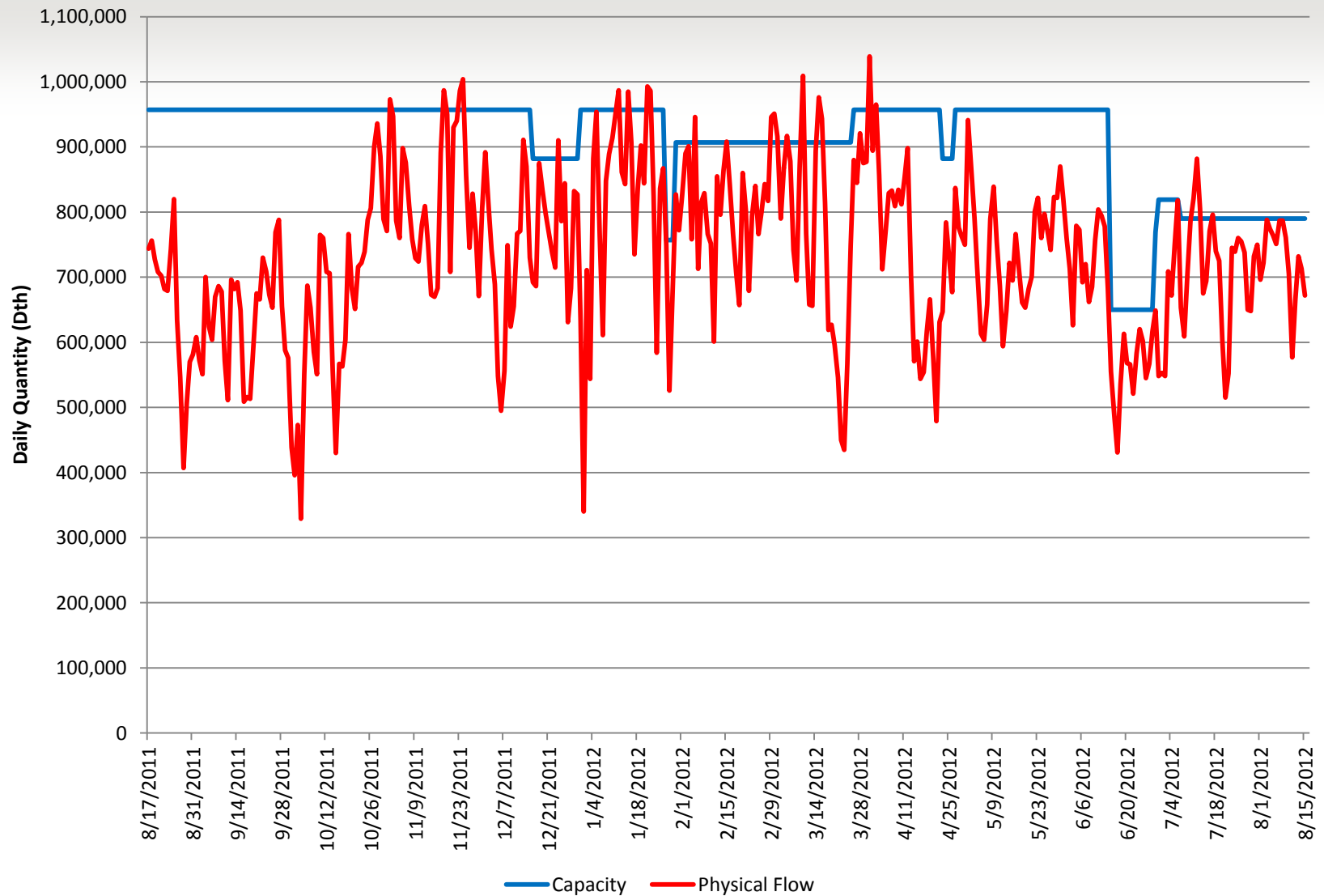
# Growing Power Generation Demand Algonquin Gas Transmission - Winter 2011/12



# Growing Power Generation Demand Algonquin Gas Transmission – Summer 2012

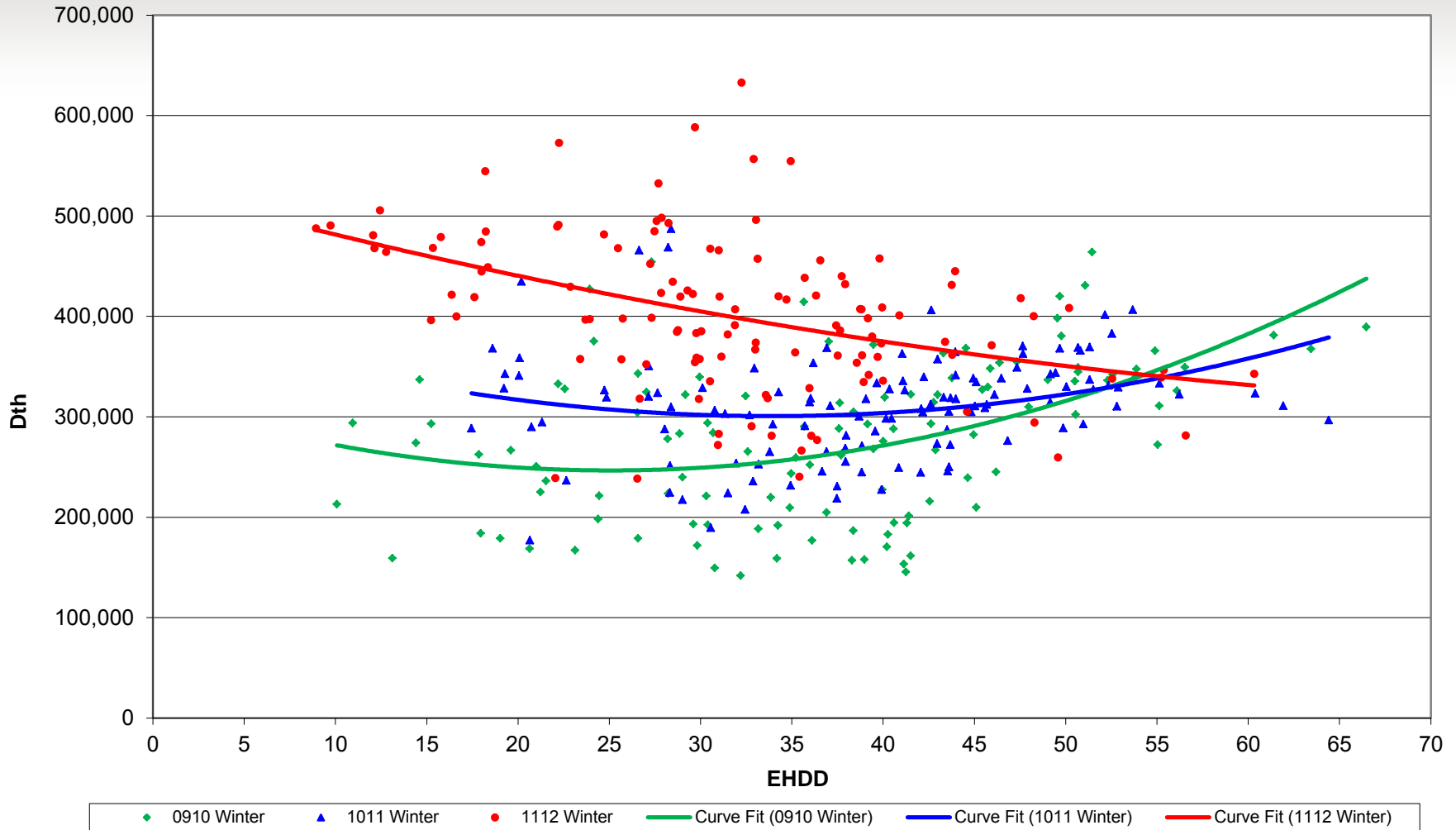


# West to East Utilization - Cromwell Station



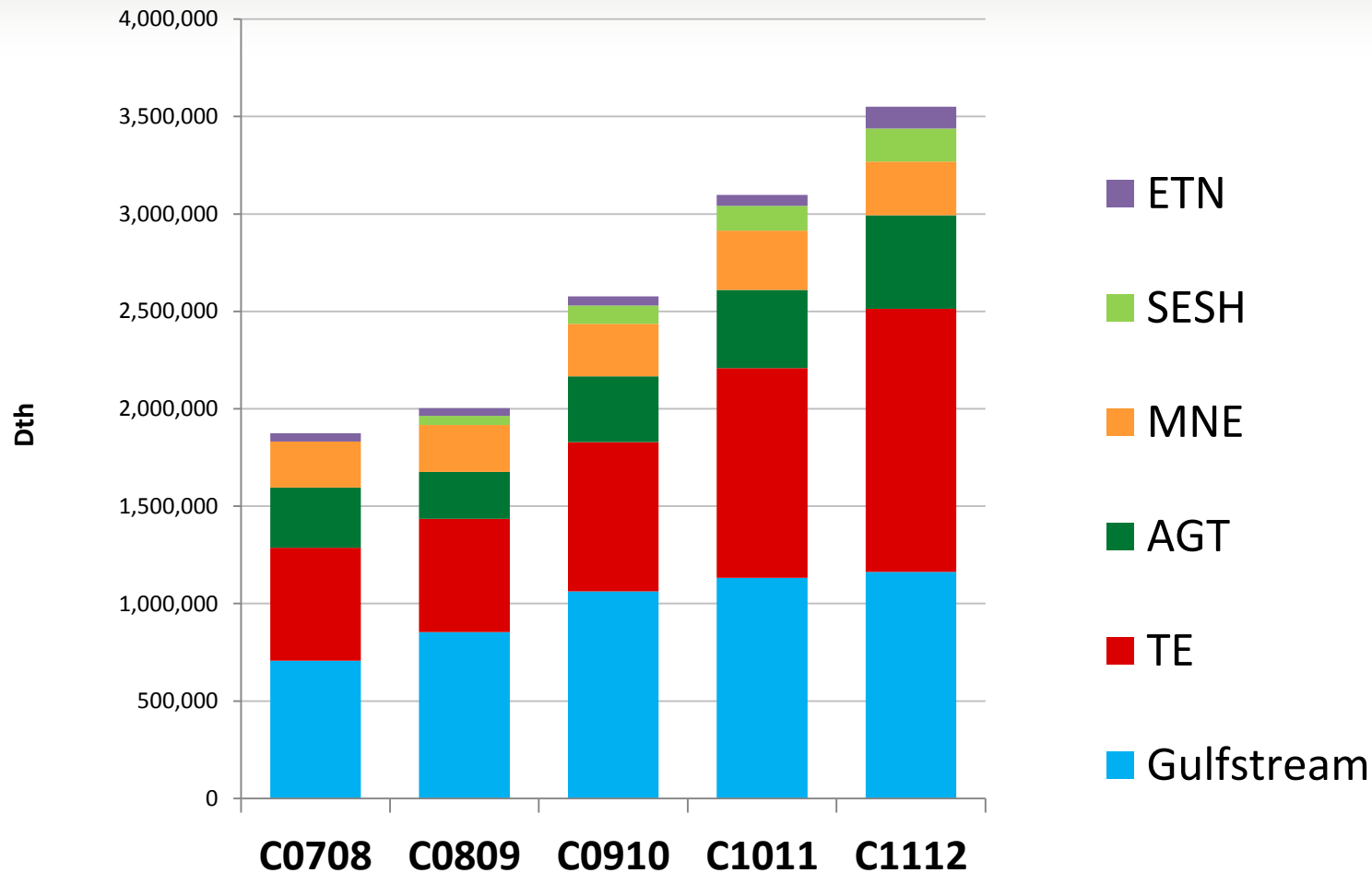


# AGT Power Plant Demand vs Weather for Winter 11/12



# Spectra Energy U.S. Pipelines

## Daily Average Power Gen Load Aug - July

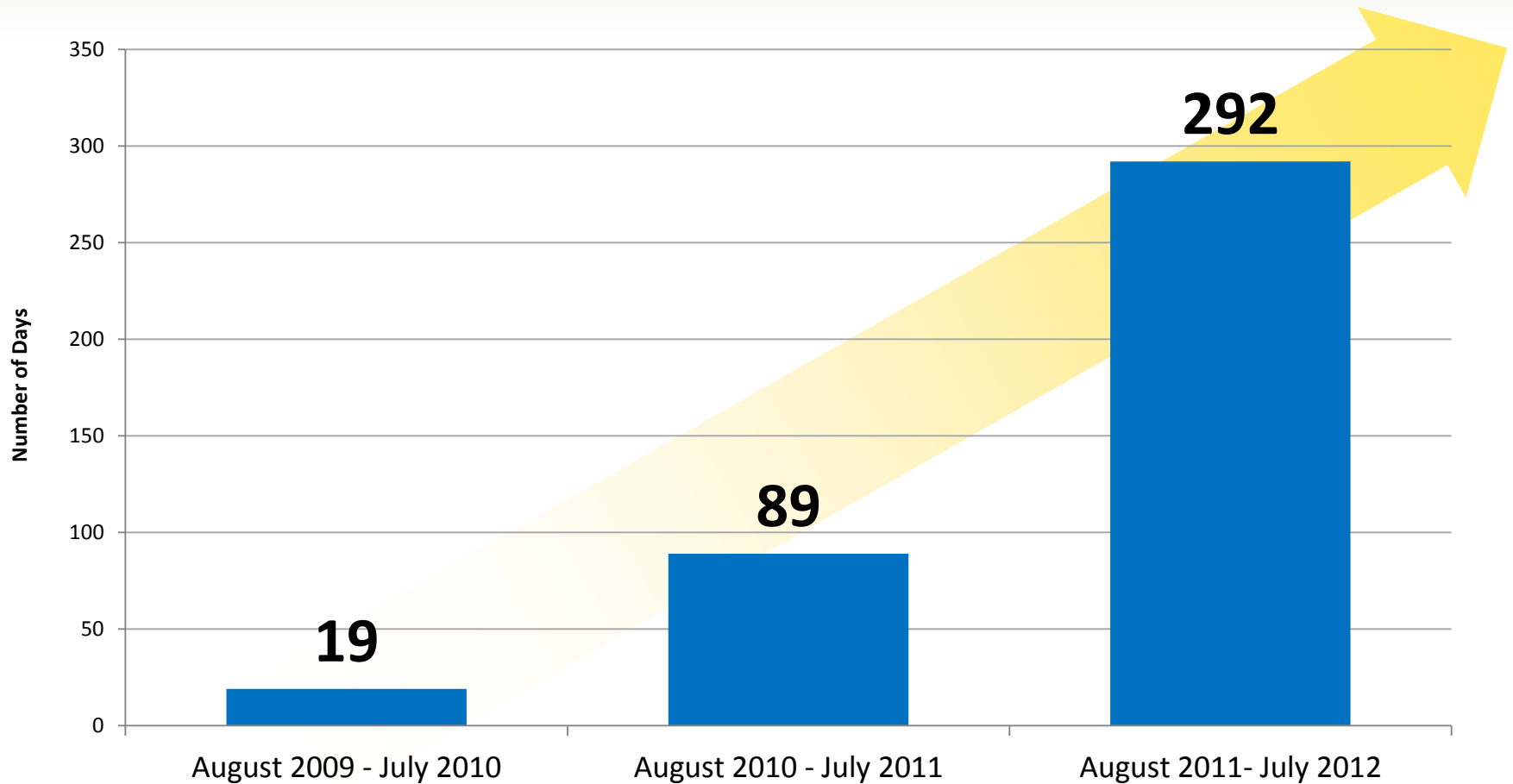


# Algonquin Gas Transmission Supply Diversity (MDth/d)



<i>Operator</i>	<b>Aug 09 - July 10</b>	<b>Aug 10 - July 11</b>	<b>Aug 11 - July 12</b>
Texas Eastern	427	525	346
Tennessee- Mahwah	55	137	237
Transco	59	45	59
Columbia Hanover	122	106	96
Millennium	124	224	389
<b>West End Supply</b>	<b>787</b>	<b>1037</b>	<b>1127</b>
Maritimes	73	105	62
Everett	107	101	50
Northeast Gateway	52	0	0
Tennessee- Mendon	49	68	81
<b>East End Supply</b>	<b>281</b>	<b>274</b>	<b>193</b>

# Days with Zero Interruptible Capacity Available on Algonquin



# Capital Projects



<u>In-Service Year</u>	<u>Number of Projects</u>	<u>Project Capital Cost (\$MM)</u>
2007	13	\$650
2008	19	1,800
2009	10	650
2010	5	900
2011	6	450
2012	3	550
Total 2007-2012	56	\$5,000
Expected 2013-2016	various	~4,000
Total 2007-2016		~\$9,000

# Texas Eastern Appalachian Shale Supply Interconnect Program



## 58 Requests In-Service & Under Agreement

(requested tap & posted M&R capacity)

**12.9 Bcf/d**

Current Appalachian Shale Supply

**1.5 Bcf/d**

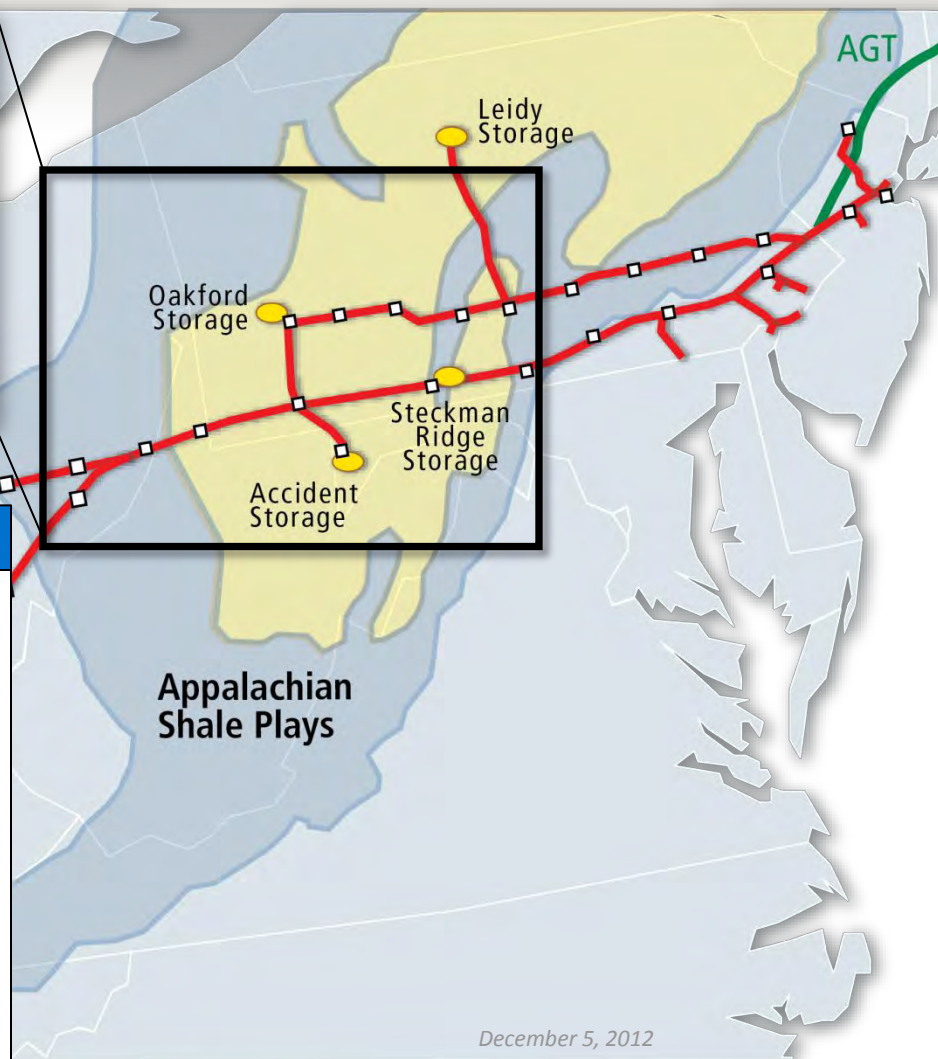
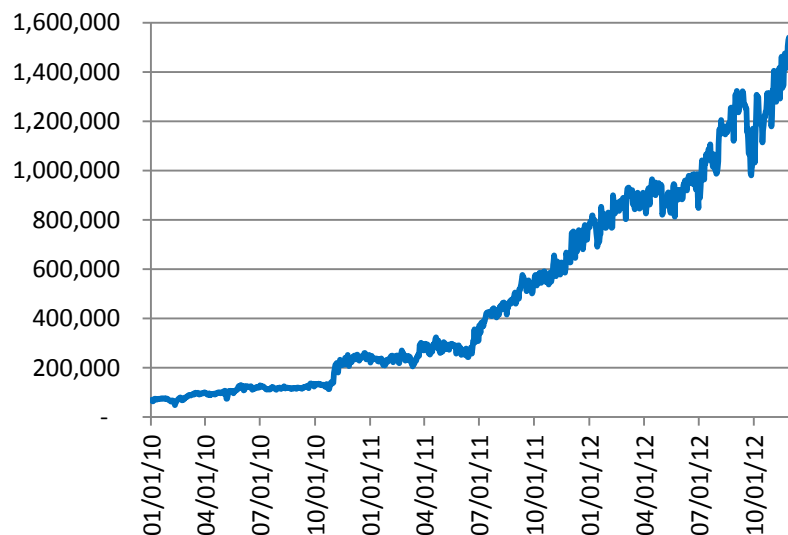
31 In-Service (posted M&R capacity)

**5.9 Bcf/d**

27 In Progress & Under Agreement  
(Scheduled 2013 In-Service)

**7.0 Bcf/d**

## Texas Eastern Appalachian Shale Supply Growth



# New Infrastructure in Response to Increase in Northeast Shale Supplies



## Connecting Marcellus & Utica Supplies to Our Diverse Markets



### *Texas Eastern Appalachia to Market* **TEAM 2014**

Providing producers access to diverse Texas Eastern markets

### *Ohio Pipeline Energy Network* **OPEN** (2014)

Connecting Utica production to diverse Texas Eastern markets

### *Northern Expansion Transmission* **NEXT** (2016/2017)

Providing Appalachian producers access to Eastern Canada LDC & power markets

### *Algonquin Incremental Market* **AIM** (2015)

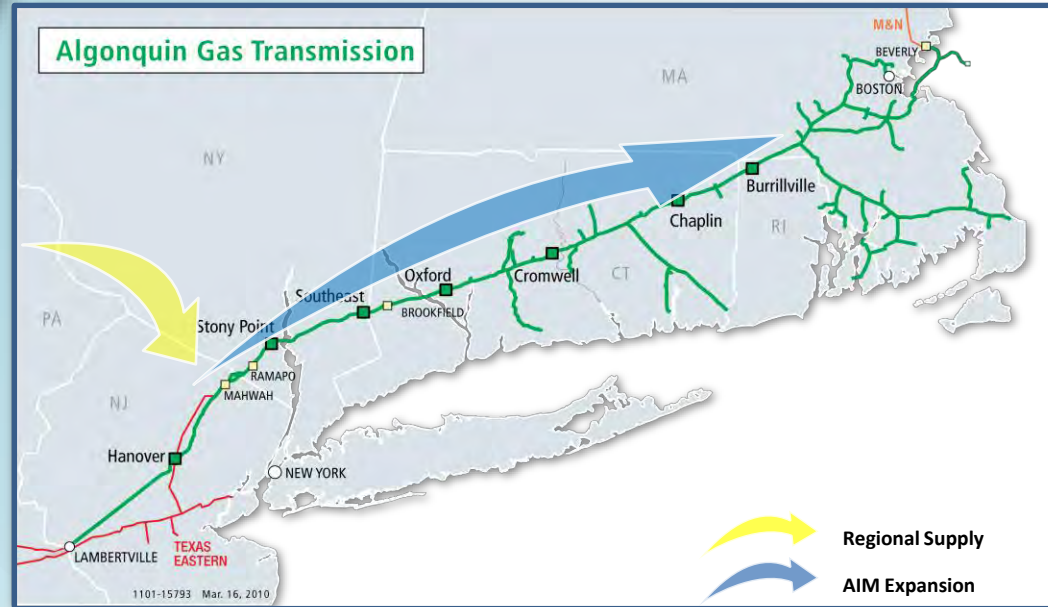
New England market pull combined with Northeast PA supply push

### *Renaissance Gas Transmission* **Renaissance** (2015)

Appalachian supply to Northern Georgia & Atlanta markets



# Algonquin Incremental Market Expansion (AIM)



## Purpose:

- Provides growing New England demand with access to abundant regional natural gas supplies

## Project Scope:

- 450 MMcf/d mainline expansion from Ramapo to the head of the G-system
- Open Season from September 20, 2012 to November 2, 2012
- In-Service: 2H16

# New Jersey – New York Expansion Project

## Project Details:

- Extends Texas Eastern reach farther into New Jersey and into New York City for the first time
- 800 MMcf/d expansion connecting Northeastern PA Marcellus supplies with a new delivery point in Manhattan
- CapEx: \$1.2 B

## Milestones Achieved:

- Filed FERC application Dec 2010
- FEIS Issued March 2012
- FERC Certificate May 2012

## Next Steps:

- Construction began July 2012
- In-Service: 2H13



## Facilities:

- 15.9 miles of new 30" pipe from Staten Island to Manhattan, NY
- Replacement of approximately 5 miles of pipe with 42" pipe on Texas Eastern
- 3 compressor station reversals on Algonquin and Texas Eastern
- Meter and regulator upgrades

# New Jersey/New York Project

**Hudson River HDD Pullback**

**November 30, 2012**

**Set-up of pipe pullback strings in 18th St.**



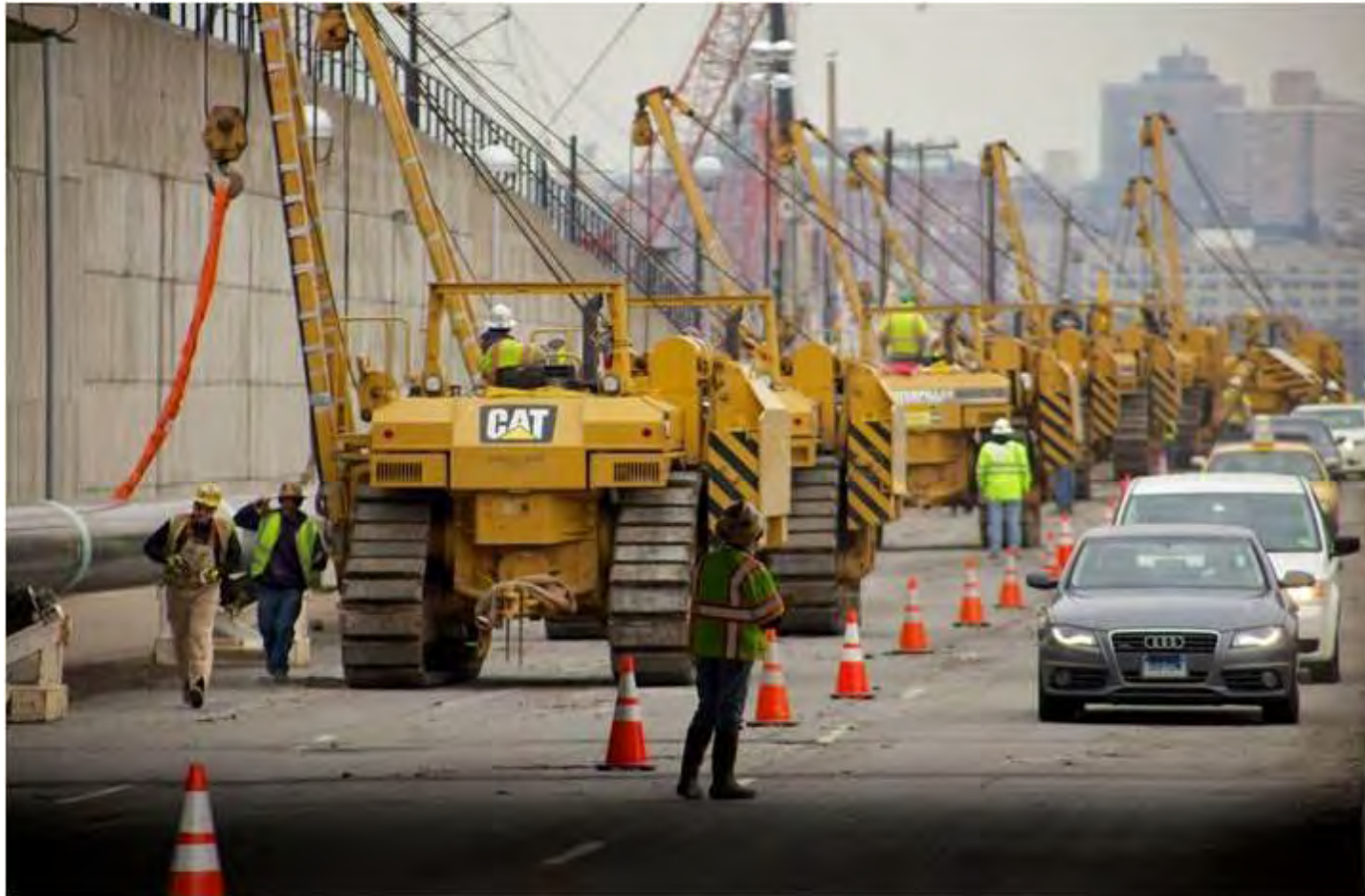


# New Jersey/New York Project

**Hudson River HDD Pullback**

**November 30, 2012**

**Set-up of sidebooms on 18th St. to move pipe**



# New Jersey/New York Project

**Hudson River HDD Pullback**

**November 30, 2012**

**Setting up of barges with cranes**





# New Jersey/New York Project

**Hudson River HDD Pullback**

**December 1, 2012**

**Pipe being pulled across the Hudson River Walkway**



# New Jersey/New York Project

**Hudson River HDD Pullback**

**December 1, 2012**

**Pipe across the Hudson River to the entry point**





# New Jersey/New York Project

**Hudson River HDD Pullback**

**December 1, 2012**

**Pipe being pulled to the entry point**



# New Jersey/New York Project

**Hudson River HDD Pullback  
December 1, 2012  
Pipe entering casing on the  
platform**



# New Jersey/New York Project

**Hudson River HDD Pullback**

**December 2, 2012**

**Tie-in weld between pullback strings**





# New Jersey/New York Project

**Hudson River HDD Pullback**

**December 2, 2012**

**Pullback underway**



# New Jersey/New York Project

Hudson River HDD Pullback

December 2, 2012

Pullback in progress





# New Jersey/New York Project

**Hudson River HDD Pullback  
December 3, 2012  
Pullhead reaches Manhattan**



# New Jersey/New York Project

**Hudson River HDD Pullback**

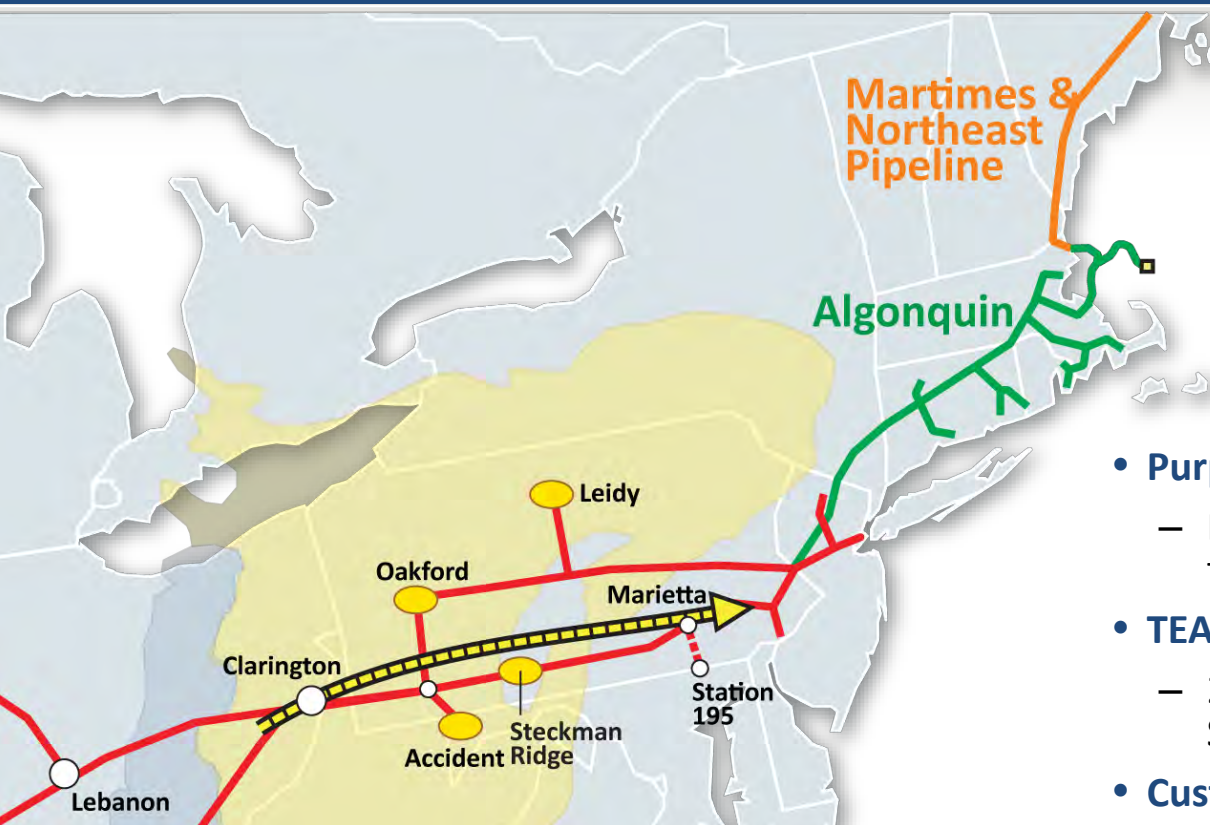
**December 3, 2012**

**Completed pullback in Manhattan**





# Texas Eastern Appalachian Market TEAM 2012



## Facilities:

- 17.9 miles of 36" pipeline loop
- 26,000 horsepower addition

## • Purpose:

- Provide customers with access to Marcellus production

## • TEAM 2012 Scope:

- 200 MMcf/d expansion from Southwest, PA

## • Customers:

- Range Resources 150 MMcf/d (16 years)
- Chesapeake Utilities 50 MMcf/d (15 years)

## • In-service: 2H 2012

# Texas Eastern Appalachian Market TEAM 2014



## Project Details:

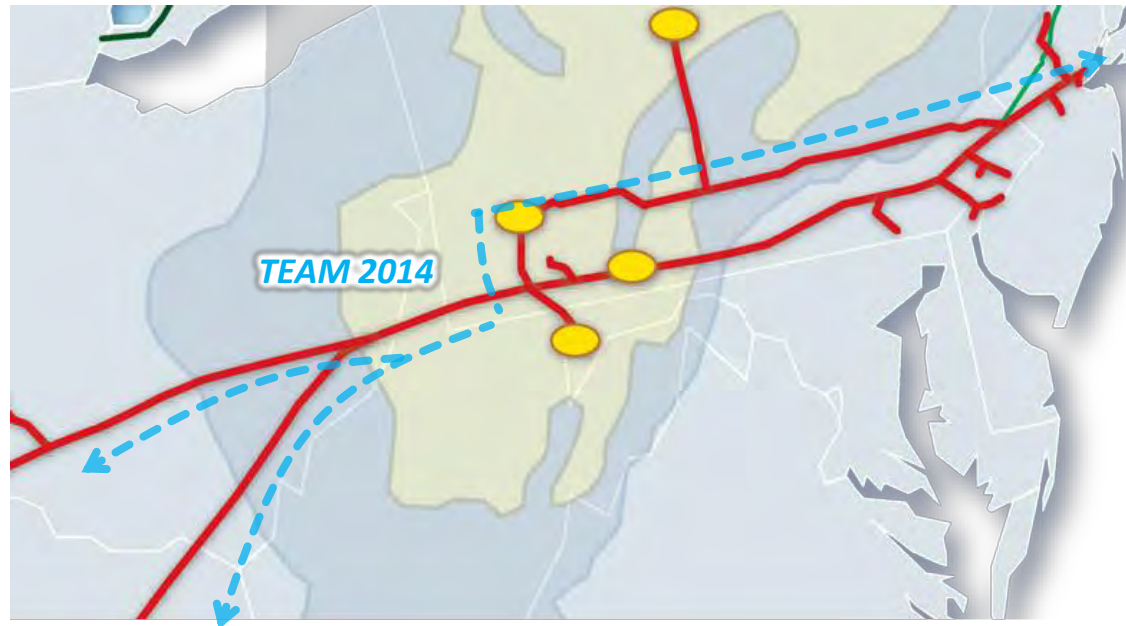
- Diverse firm path options from SW PA and WV Marcellus to Texas Eastern M3 and Henry Hub area
- 600 MDth/d
- 2H 2014 In-service

## Milestones Achieved:

- Executed PA's with Chevron and EQT for 300/d each
- FERC Pre-Filing July 2012

## Next Steps:

- File FERC Certificate Application (Feb 2013)
- Receive FERC Certificate (Dec 2013)



# Texas Eastern Transmission, L.P. Philadelphia Lateral Expansion



## Purpose:

- Provides project shippers with additional capacity on the Philadelphia Lateral

## Project Scope:

- 27 MMcf/d expansion of the Philadelphia Lateral
- CapEx: ~\$15 MM

## Customers:

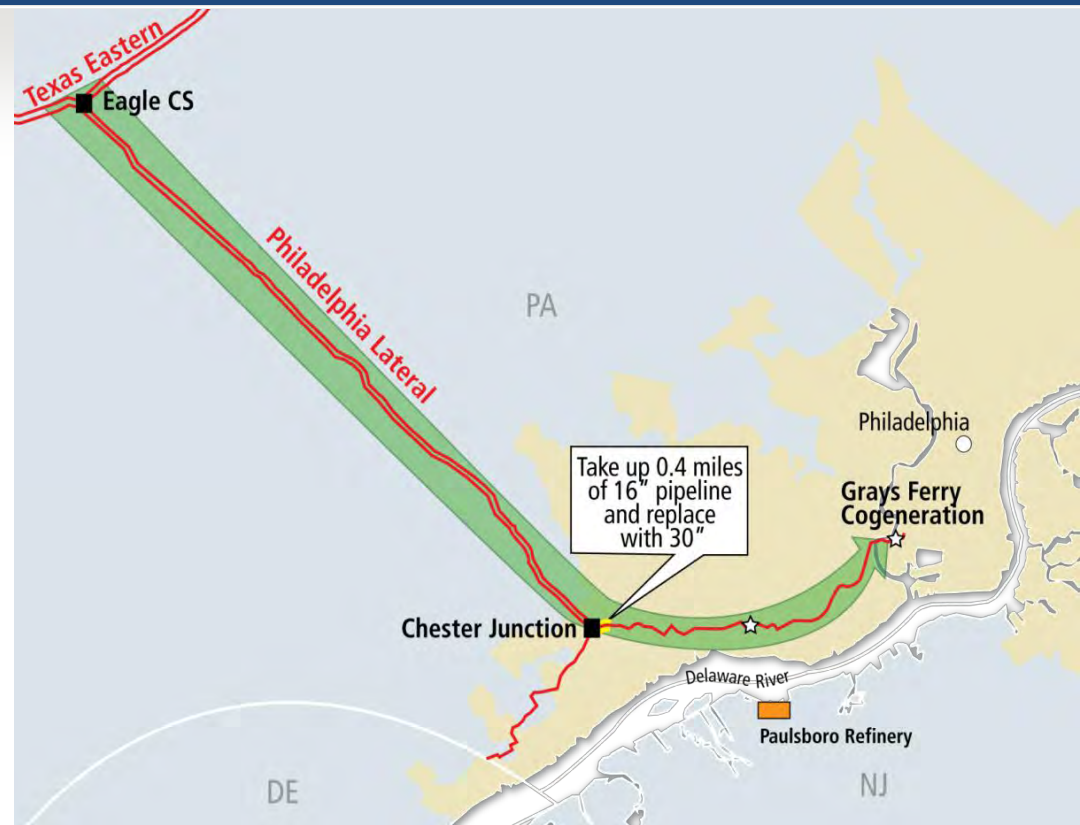
- Grays Ferry Cogeneration (15 years)
- Paulsboro Refinery (15 years)

## Project Status:

- Under Construction
- In-service 2H12

## Facilities:

- 0.4 miles take up 16" and re-lay 30"



# Ohio Pipeline Energy Network OPEN Project



## Project Details:

- Expansion of Texas Eastern into Ohio Marcellus and Utica Production
- Receipt and delivery point optionality to access to Texas Eastern's diverse markets in M-2 to Access Area
- Capacity: 700 – 1,000 MDth/d
- In Service: 2H 2015

## Milestones Achieved:

- Executed PA with AEP's Ohio Power Co.
- Completed Open Season May 18

## Next Steps:

- Finalize scope and facilities
- Complete PA's with shippers

