

OEB Natural Gas Market Review

North American & Ontario Natural Gas Markets to 2020



December 4, 2014

Introduction

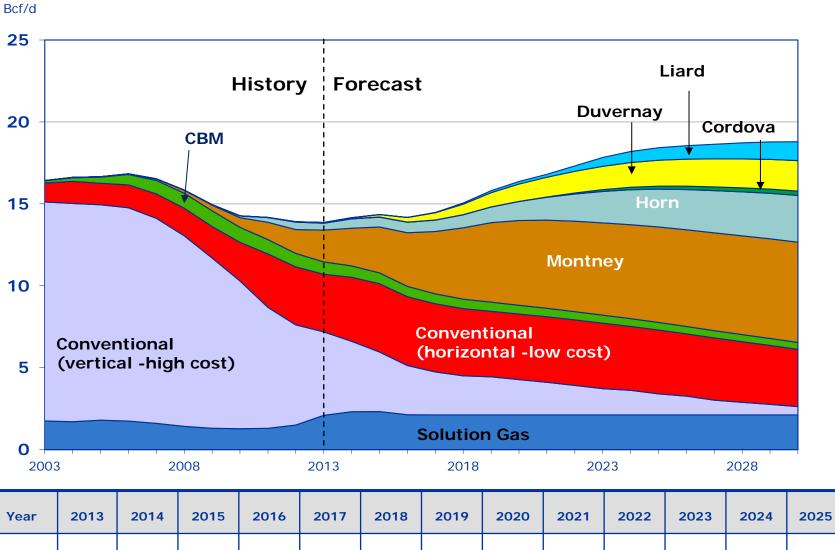


- North American Gas Supply more plentiful than previously thought
- Flow Patterns are evolving and gas transmission facilities are being constructed to facilitate the changes
- Cost of gas for consumers is a function of two main components
 - Commodity price
 - Transportation and distribution costs



WCSB Gas Supply





Bcf/d

13.9

14.2

14.3

14.2

14.5

15.1

15.8

16.4

16.8

17.3

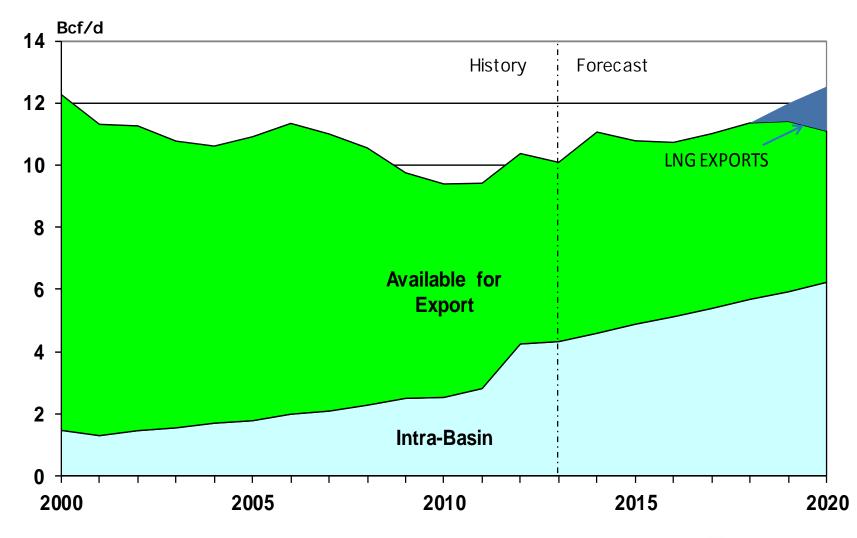
17.8

18.2

18.4

Total NGTL System Deliveries



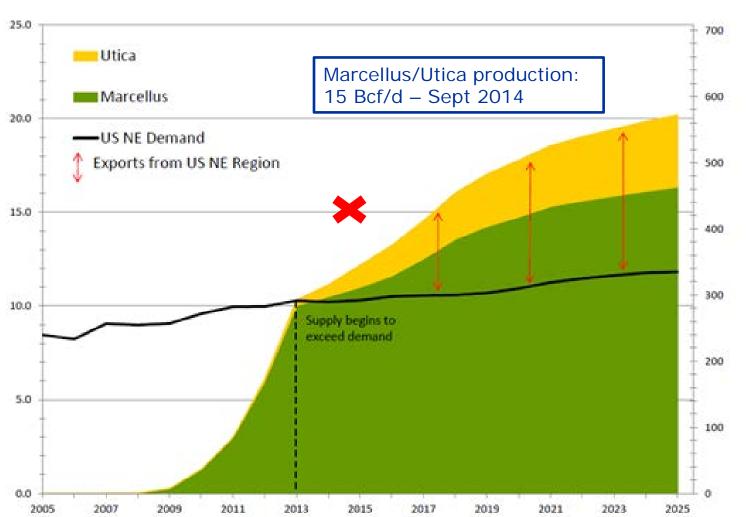




U.S. Northeast Supply and Demand



10⁶m³/d

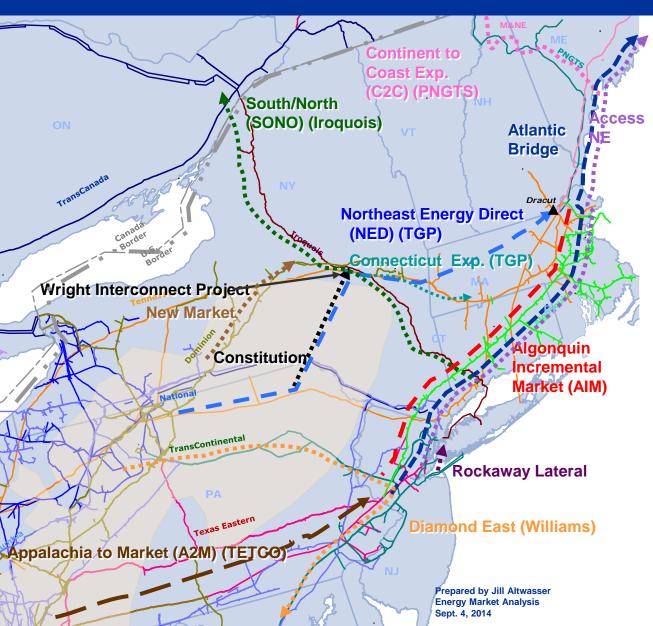


() TransCanada

Bcf/d

Incremental Natural Gas Projects





NED (TGP)

Supply Zone will be from TGP Line 300 & Constitution. Mkt zone is from Constitution to Dracut. Scalable to 2.2 Bcf/d starting Q4 2018.

Atlantic Bridge (M&NE & AGT)

Increase capacity on AGT & allow north flow on M&NE by 100 MMcf/d scalable to 600 MMcf/d starting Q4 2017.

AIM (Algonquin)

Increase capacity on AGT by 450 MMcf/d starting Q4 2016.

Connecticut Exp. (TGP)

Increase TGP Line 200 capacity by 75 MMcf/d starting Q4 2016.

Constitution

125 m., 650 MMcf/d greenfield P/L starting Q4 2016. Iroquois's Wright Interconnect Project allows gas to be received onto Iroquois and TGP.

A2M (TETCO)

Increase capacity on TETCO to allow north flow by up to 1 Bcf/d starting Q4 2018.

SONO (Iroquois)

Allow 300 MMcf/d to flow north from Constitution, Dominion $\ \& \ Algonquin.$

C2C (PNGTS)

Increase capacity by 132-182 MMcf/d starting Q4 2016.

Rockaway Lateral (TransCo.)

3.2 mile greenfield pipeline that will allow 638 MMcf/d to be delivered from TransCo. onto the National Grid system starting the second half of 2014.

New Market Project (Dominion)

Increase capacity of Dominion's upstate New York system by 110 MMcf/d to serve Niagara Mohawk and Brooklyn Union.

Diamond East (Williams)

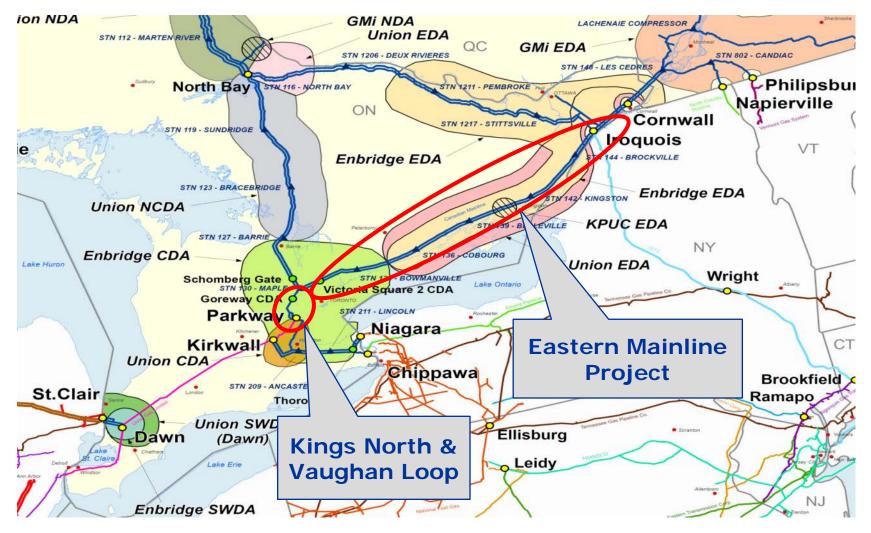
Increase capacity by 1 Bcf/d on TransCo.'s Leidy Line to TransCo. Stn. 210 starting Q4 2018.

Access NE (Spectra)



Mainline Planned Facilities







Evolving Supply Choice Alternatives

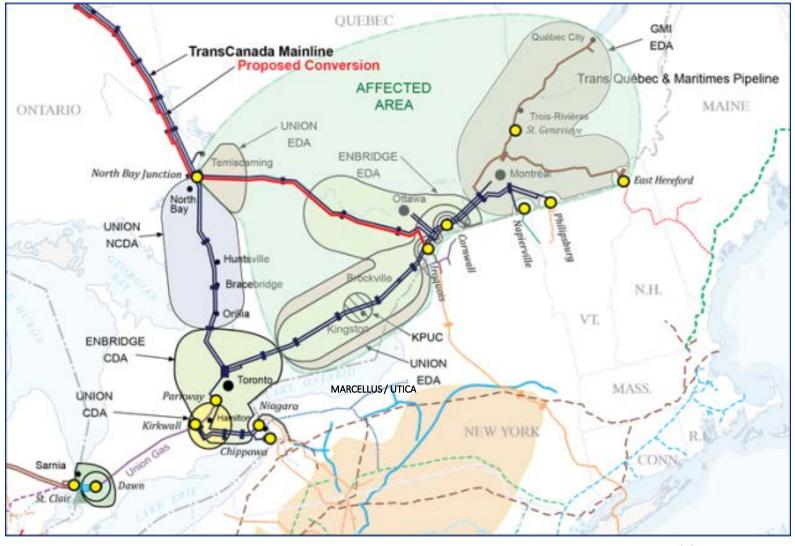


- King's North and Vaughan Loops
 - Increase capacity for gas from Parkway by ~800 TJ/d
- Niagara / Chippawa Receipt Capacity
 - Currently ~400 TJ/d, expanding to over 1.1 PJ/d by 2016
 - 200 TJ/d will flow on Hamilton line directly to EGD
- Total Parkway to Maple capacity will have increased by 1.2 PJ/d between 2012 and 2016
- Flows from WCSB are being displaced by Marcellus and Utica supply due to market choice, not because supply from WCSB is no longer available



Energy East Affected Area







The Affected Area

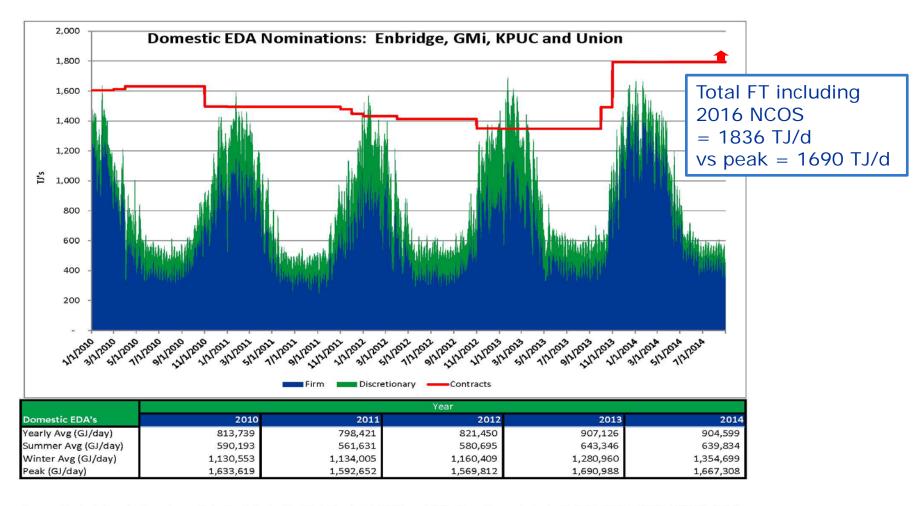


- Is a consolidated system that serves two markets; domestic and export
- Current Consolidated Capacity: 3.2 PJ/d
- System was designed and built for FT load
- Over time, export load has decontracted was 1600 TJ/d in 2007
 - Domestic: FT Contract: 1.8 PJ/d, Peak Use = 1.7 PJ/d
 - Domestic FT contract levels exceeds Peak Use
 - Export : FT Contract = 0.7 PJ/d, Peak Use = 1.5 PJ/d
 - Export FT contract levels <u>significantly</u> below Peak Use
 - Export FT contract and use expected to decline as Marcellus directly connects to NE US markets

Energy East is not using or impacting capacity used to serve domestic markets, it is repurposing the portion of capacity that is no longer contracted by export markets () TransCanada

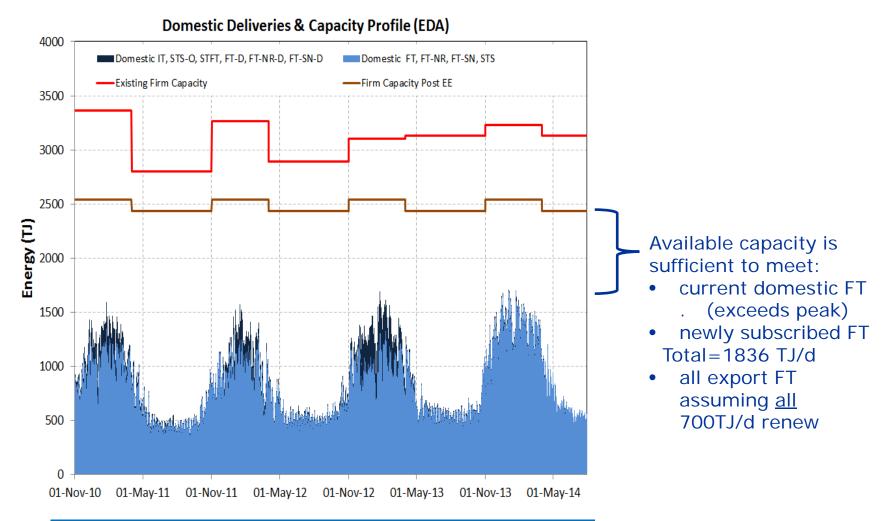
Domestic EDA Volumes





Does not include Nominations from within the 'Affected Bubble'. Firm is FT, FT-NR, and STS. Discretionary includes IT, STFT, FT D, FT SN D, FT-NR D, STS O

Eastern Delivery Area Capacity & Domestic Market Flow



Ample capacity to meet domestic markets And > \$900 million in savings

Conclusions



- Markets have an increasing number of options of where to source supply (WCSB, Dawn, Niagara/Chippawa, Iroquois)
- New transmission capacity required to access Dawn and Niagara/Chippawa supply
- Enbridge, Union and TransCanada all have expansion projects under development
- Marcellus supply connections via Iroquois will access the TransCanada system downstream of all capacity constraints affecting Ontario markets
- Markets have tools and options to manage gas price exposure

