Ontario Energy Board Natural Gas Market Review

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Industrial Gas Users Association

- Members from mining, metals, petrochemicals, pulp & paper and manufacturing sectors
 - o Over 24,000 jobs in Canada, 750,000 jobs worldwide
 - Members are in cyclic commodity business
 - Energy costs factor in international competitiveness
- Consumption exceeds 100 PJ per year
- Varied use of gas, varied load profile
 - o feedstock, process heat, power generation, space and water heating
 - o Main fuel, auxiliary fuel, back-up fuel
- Different gas service combinations
 - From system gas to own transportation and storage
- Heavy reliance on the secondary market
 - o Simple, flexible



Our Gas Market Reality

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Last winter, this winter



Going Into Last Winter

- New NEB Tolls for the Mainline (source: NEB RH-003-2011 Decision March 2013, Adobe pp20,33-34)
 - \$1.42/GJ from Empress to Dawn for firm service (FT)
 firm: annual contract & annual tolls, guaranteed capacity
 - o TCPL had asked for \$2.52/GJ
 - TCPL full control over the cost of discretionary services discretionary: no obligation, pay to use only if excess capacity available
- TCPL priced discretionary services 300% 500% of firm tolls (source: TransCanada Quarterly Surveillance Report for Q4 of 2013)
- Secondary market responded
 - o Industrials faced a premium for (secondary market) services
 - Dawn storage did not fill-up



The Cold Winter of 2013-14

- Polar Vortex, prolonged frigid conditions (warmer than design day)
- By February TCPL discretionary services were priced at 1200% of firm (source: TCPL Quarterly Surveillance Report for Q1 2014, Adobe p 15)

<u>Gas Prices at Dawn</u>

(source: Union Gas Website, Presentation by Chris Shorts, Natural Gas Market Update and Evolving Supply Dynamics, p 12)

•	Winter Strip (Buying in Oct for delivery Nov – Mar)	\$4
•	Month Ahead (Buying monthly for delivery the next month) Daily Spot (Buying daily)	\$4 - \$14
	 Nov 2013 range 	\$3 - \$4
	 Dec 2013 range 	\$3 - \$5
	o Jan 2014 range	\$4 - \$ 47
	 Feb 2014 range 	\$8 - \$ 79



Detrimental Impact on Industrials

(IGUA survey)

- Billion dollar order of magnitude hit on markets (source: compilation of figures from utility QRAM applications and closing of the books)
- Major energy budget overrun for IGUA members (source: IGUA survey)
 - Gas budget overruns up to 300%, typically in the range 5%-15%
 - Electricity budget impact up to 480%, typically in the range 15%-30%
- High curtailments
 - 20+ days in Ontario (50+ days in Québec)
- Impact severity varied with location, load profile & service type
 - Secondary market, direct contracted capacity, through the LDC
- Polar Vortex can not be blamed for everything
 - New toll regime, low storage, competition from US power market



Outlook for the 2014-2015 Winter

- Normal BAU projections for demand, infrastructure and supply
- Dawn storage is full
- Discretionary services priced lower than last year (95%-300% of FT)

However

- Higher cost & fewer services offered in the secondary market
 - Member could not secure winter supply for Enbridge EDA from the secondary market and was asked to buy daily
 - Member in Union SWDA (almost on top of Dawn) paid a 20% premium
- The forward price of winter supply at Iroquois is twice the forward price of supply at Dawn
 - Basis differential is nine times the transportation cost, suggesting constraint
- Buffalo got 5 ft of snow in November...



Evolution of Natural Gas Markets

Supply, Infrastructure, Demand

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Supply – Dramatic Change

- Within 5 years North America has gone from 'short' to 'surplus'
- ON is close to Marcellus and Utica (larger than WCSB)
- Dawn storage is a major asset for Ontario

Opportunity for ON ... investment, jobs, quality of life

- Reduce the landed cost of gas & electricity
- Enhance competitiveness of ON industry
- Attract new investment and grow the economy
- Develop the ring of fire



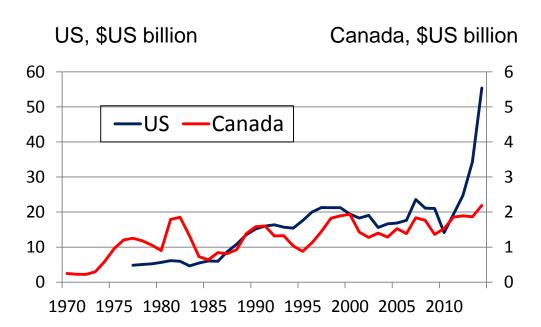
Demand

- Stagnant res/com
- Steady growth in power generation
- Emerging transportation
- Industrial

www.igua.ca

- o Stagnant in ON
- <u>Manufacturing revival in</u> <u>the US</u>

Chemistry Industry Investment Source: Chemistry Industry Association of Canada



Infrastructure must Adjust

- We recognize that changing the architecture of the gas infrastructure is non-trivial & entails cost
- Emerging flow configurations will shape trade & investment patterns for several decades
 - Energy enables economic development
 - Industrials need access to reliable and competitively priced energy to survive, compete & grow
 - o Timing is important
 - Market redesign should reflect the price sensitivity of market demand
- Managing the transition is important
 - Properly considered but...reasonably expeditious
 - Coordinated (bigger picture) view
 - Costly lost opportunity otherwise



ON Infrastructure Needs

- US pipeline construction to connect new supply to Dawn
- Enhanced physical and financial liquidity at Dawn
- Removal of pipeline bottlenecks **from** Dawn to markets
- Redefined role and tolls for the Mainline
 Continues to be very important for security & diversity of supply
- Manage the cost of stranded Mainline assets
- Efficient and smooth transition process



Infrastructure Adjustment

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Piecemeal, Inefficient and Expensive



Industrial Market Expectations

- Turn proximity to Marcellus into competitive advantage
- Long term
 - Reduced landed cost of gas in Ontario
 - Expanded physical and financial liquidity at Dawn
 - Right-sized pipeline system
- Short term
 - Avoid price shock and service deterioration
 - Road map for infrastructure transition
 - Smooth transition process

Transitioning the markets should not be detrimental to markets



Transition Update

- Bottlenecks NEB decision?
- Stranded Asset Issue Energy East application was filed late October
 - Will go to hearing in late 2015... currently fiercely opposed
 - NEB process limits broad public engagement
 - ON and QC governments have stepped in to engage & represent the public
- Domestic gas market interests are pitted against oil export interests unnecessarily
- Insufficient attention to:
 - The status of pipelines connecting new supply to Dawn
 - The need for enhanced financial liquidity at Dawn
- The economic revival witnessed in Michigan, Ohio and Pennsylvania is sadly lacking in QC and ON



Costly & Painful Process

- Fierce fighting among the pipeline majors
- Many different hearings in multiple jurisdictions deal with aspects of the transition (NEB, OEB & the Régie)
- Regulatory system is strained under the magnitude, scope and pace of change
- Media tug-of-war, stepped up lobbying
- Secondary markets offer less service at higher cost
- Lumpy industrial investment is going to the US

Harmful to competitiveness ... Missed economic opportunity



Timely Gas Market Review

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Last winter, long term, Information gap



Recovering from Last Winter

- Restore confidence in the market
 - Investigate the events and ensure all parties followed the 'rules'
 - Examine the adequacy of the 'rules'
- Safeguard against last winter becoming the new norm; Identify and monitor key influencers
 - Gas storage and pipeline capacity
 - o The interdependence between gas and electricity markets
 - o Interplay between domestic and export markets
 - Secondary market dynamics
 - More volatile weather patterns
- Facilitate better information in the market place
 - Annual natural gas deliverability report, periodic updates
- Replicate FERC's gas market monitoring role in Canada (NEB?)



Mid to Long-Term Objectives

Consider both extra-jurisdictional developments and broader/longer term transition to new market configuration

- Streamline the infrastructure transition process
 - Consideration for how any specific application fits in the global transition process
- Facilitate supply diversity
 - Ensure timely removal of pipeline bottlenecks **from** Dawn to markets
 - Ensure that ON gas markets are served after repurposing of stranded Mainline assets
 - Develop a perspective of the evolving role of the Mainline and a suitable toll regime
- Ensure the transition is not detrimental to markets
 - Avoids price shocks
 - Foster a vibrant secondary market

Regulators, applicants and intervenors share responsibility for facilitating consideration of the bigger picture



IGUA and Energy East

- Enthusiastic about the concept of the project
 - Leverages Canadian energy resources to strengthen the industrial base in Canada
 - Brings new life to the petrochemical industry
 - Repurposes underutilized gas assets
- Support the transfer of underutilized assets from Empress to North Bay
- Issues with the transfer of the utilized North Bay Short cut
- We should find a way to build the Energy East pipeline without harming gas markets



Thank You

