Impact of Energy East on Ontario Natural Gas Prices

Prepared for:
Ontario Energy Board

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Disclaimer

This report presents views of ICF International. The report includes forward-looking statements and projections. ICF has made every reasonable effort to ensure that the information and assumptions on which these statements and projections are based are current, reasonable, and complete. However, a variety of factors could cause actual market results to differ materially from the projections, anticipated results, or other expectations expressed in this report.

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   - Concentric Energy Advisors (September 2014)
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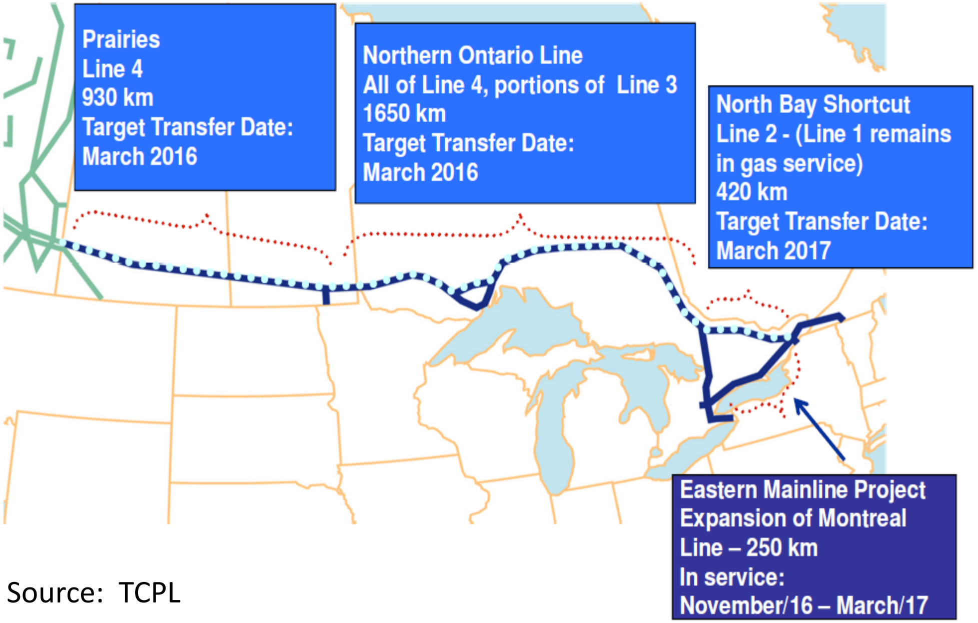
Purpose of the Analysis

The purpose of this work is to estimate the impact of TransCanada's Energy East project on Ontario's natural gas prices.

- **TransCanada proposes to convert part of its natural gas mainline to a crude oil pipeline, reducing gas pipeline capacity in the Eastern Ontario Triangle (EOT) by about 0.6 PJ/d (from 3.2 PJ/d to 2.6 PJ/d).**
  – Energy East (EE) would remove 1.3 PJ/d of natural gas transportation capacity from service into Western Ontario, and 1.2 PJ/d from the EOT.
  – The Eastern Mainline Project (EMP) would add about 0.6 PJ/d of capacity to the EOT.
  – Throughout this presentation, ICF refers to both EE and EMP collectively as the "Energy East" project.

- **ICF has been engaged by the Ontario Energy Board (OEB) to:**
  – Conduct an independent market analysis to assess how the change in capacity could affect gas markets and prices in Ontario over the next 20 years.
  – Review and comment on other studies that have investigated the impacts of Energy East in Ontario and Quebec.
  – Participate in a stakeholder meeting to discuss the results of this study.



Source: TCPL

TransCanada

Key Elements of Gas Prices in Ontario

- **Local Demand Growth within Ontario**
- **Supply Availability**
- **Pipeline Capacity Changes within and into Ontario**
- **Northeast U.S. Demand Growth and Pipeline Capacity Changes**

Conclusions

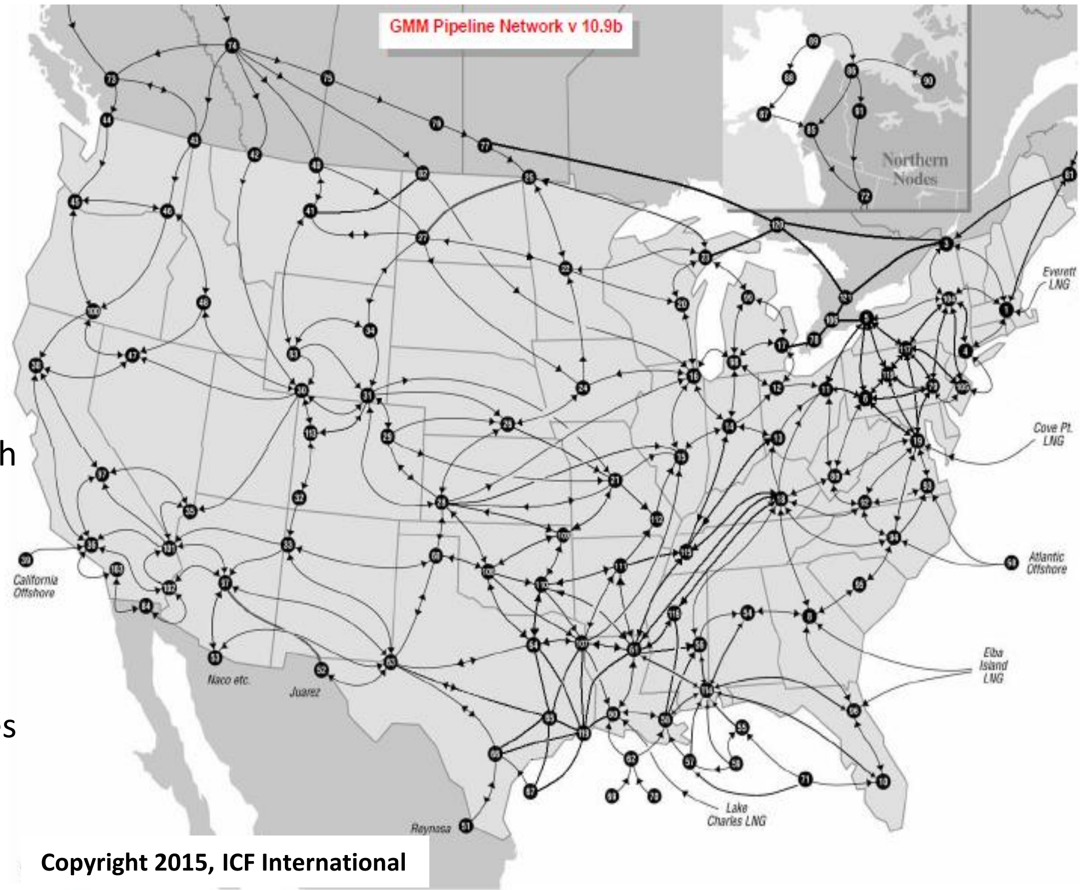
- This study focuses on gas price* impacts created by Energy East at Dawn and Iroquois/Waddington price points from 2016-35 using ICF's Base Case projection.
  - While most gas consumed in Ontario is not purchased at the Iroquois/Waddington price, this price represents a proxy for the value of natural gas and the impact of pipeline constraints on the EOT, downstream of Maple.
- The price impact is concentrated in the winter; summer price impacts are minimal.
- The Energy East project does not affect Dawn prices significantly, as Dawn has direct access to robust storage resources and more direct access to Midcontinent and Marcellus gas supplies.
- At Iroquois/Waddington, the Energy East project increases the annual average price by $0.18/MMBtu and the winter price by $0.69/MMBtu between 2016-35, a 10% increase. Peak day prices at Iroquois/Waddington (which occur in January) increase by nearly $4/MMBtu with Energy East.
- Only one of the other studies that we reviewed, the Wood Mackenzie study presented to the OEB on behalf of Union Gas, presents price impacts in Ontario.
  - The study projected higher prices at Iroquois/Waddington in the Energy East case, relative to the non-Energy East case.

*For the purposes of this study, all prices referenced are in US$.

ICF's Technical Approach

Gas Market Model Framework

- **ICF has relied on its Gas Market Model (GMM®), an equilibrium model for the North American gas market. It can be used to:**
  - Assess the impact of new supply and pipeline infrastructure on gas markets.
  - Evaluate the impact of new pipelines (and pipeline retirements) on supply development and basin and consuming market prices.
  - Assess the impact of power demand growth on markets.
  - Examine the drivers of price basis differentials.
  - Forecast alternative gas price scenarios.
  - Review impacts of gas development policies and regulations.
- **The GMM has been used in previous studies for the OEB to evaluate gas market development in Ontario.**



Assumptions for ICF's Market Forecast

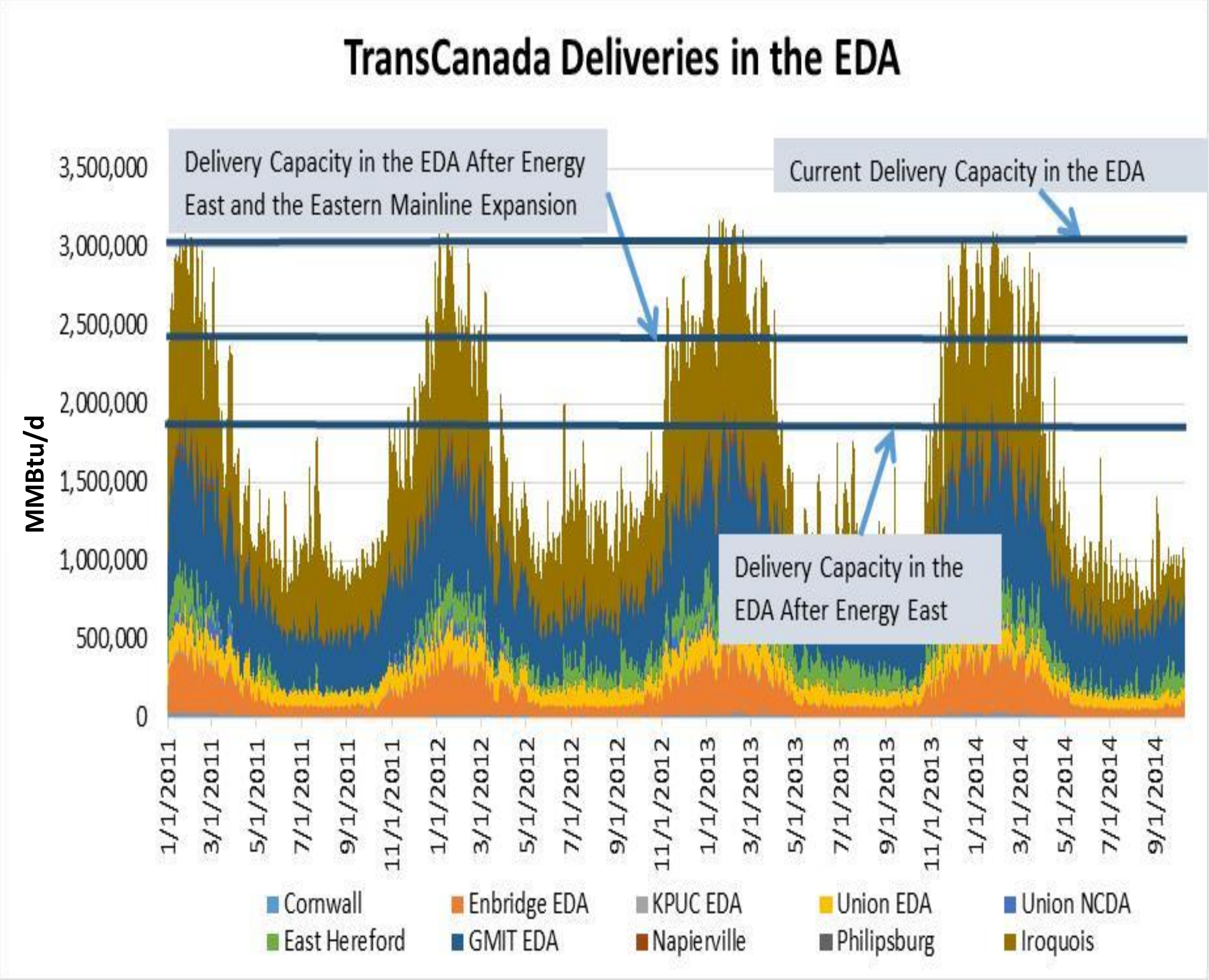
- **GDP growth rate:**
  - For Canada -- 2.5% per year throughout the forecast.
  - For United States in 2015: 2.9% per year per *Wall Street Journal's* September 2014 Survey of Economists.
  - For United States 2016 forward -- 2.6% per year.
- **Electricity demand growth:**
  - Canada and United States growth is 1.2% per year.
- **Projected weather is consistent with 20-year average seasonal patterns.**
- **Reflects one plausible outcome of existing and proposed Canadian and U.S. emissions regulations, which generally favor the continued replacement of coal-fired electricity generating facilities with natural gas plants.**
- **Reflects renewable generation capacity increases to meet state and provincial RPS.**
- **For Ontario nuclear units:**
  - All Pickering Station units are assumed to be offline by 2020.
  - Planned refurbishment of all the units at the Darlington and Bruce stations will remove substantial portions of nuclear capacity from service starting in 2016.
- **U.S. nuclear plants are assumed to have a maximum life span of 60 years; this assumption results in nearly 25 GWs of retirements between 2028 and 2035.**

Assumptions for ICF's Market Forecast (continued)

- **Economically recoverable natural gas resources in the U.S. and Canada total roughly 4,000 trillion cubic feet (Tcf).**
  - Shale gas resources account for over 50% of the total recoverable resources.
- **Gas supply development is expected to be consistent with recent levels.**
  - No significant restrictions on permitting or hydraulic fracturing beyond current restrictions.
- **ICF assumptions about nuclear plant refurbishments affect the forecast of Ontario natural gas demand.**
  - After the retirement of the Pickering Station's 4 nuclear units in 2020, the 10 remaining nuclear units at the Darlington and Bruce Stations are all scheduled for refurbishments that will remove capacity from service through 2031. ICF anticipates a longer period of nuclear plant outages in Ontario than the NEB, under the assumption that refurbishing the remaining nuclear units will take at least as long as such refurbishments have taken in the past. This results in a higher demand forecast than the NEB's official forecast.
- **Pipeline capacity expansions over the next 4 to 5 years are consistent with announced projects.**
  - In the long-term, pipeline capacity is expanded when the market projection indicates the need for additional capacity (i.e., increased basis).
  - See Slide 10 for specific pipeline expansions that are relevant to Ontario.

Historical TCPL Flows in the EOT

- Flows show the importance of TransCanada transport across Ontario, particularly during peak winter months.
- Both Ontario and U.S. shipper behavior have supported the flows.
- Future flow will be affected by factors mentioned earlier on Slide 3.



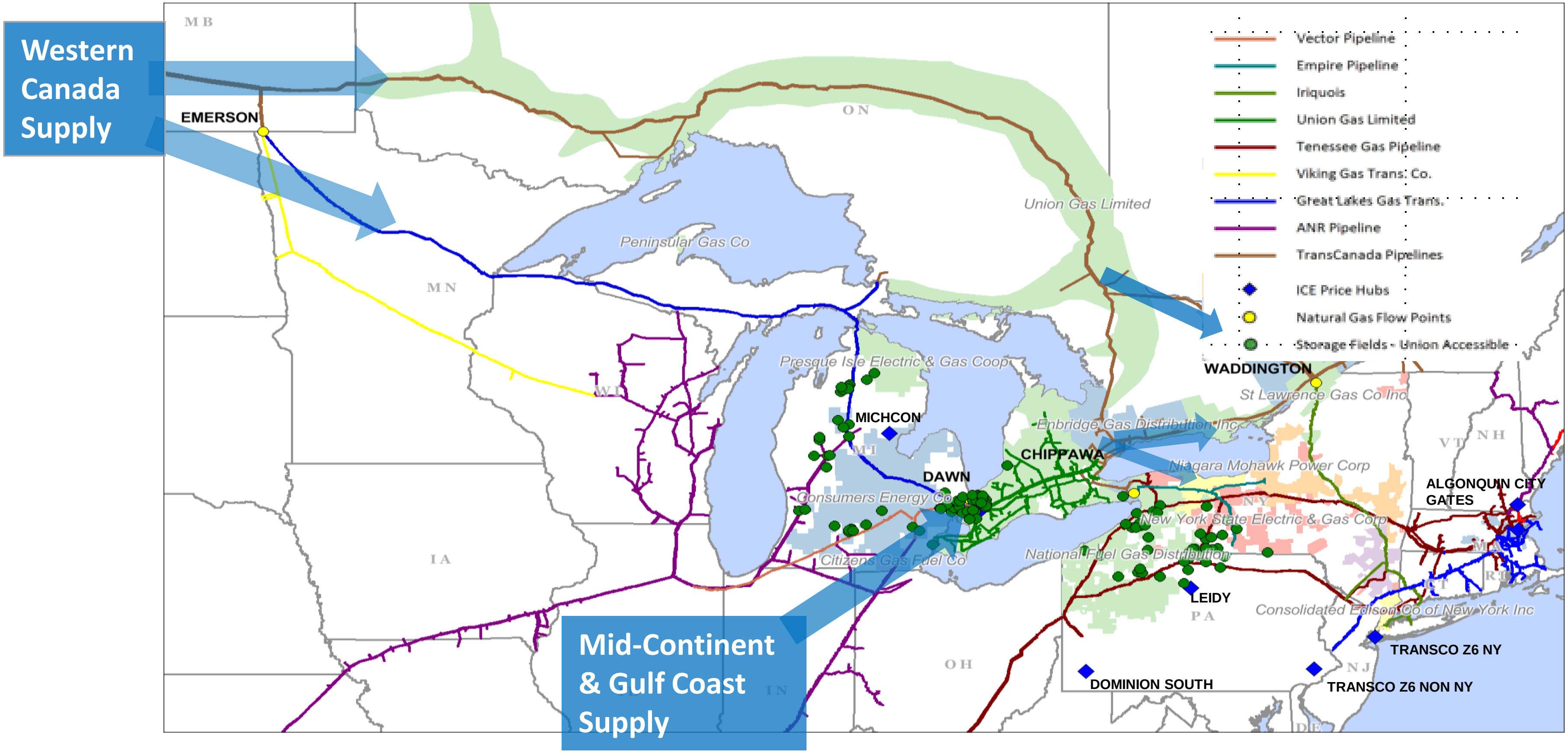
Source: ICF and Lippman

Pipeline Expansions Included in the ICF Base Case

(All Capacities Estimated from Public Filings)

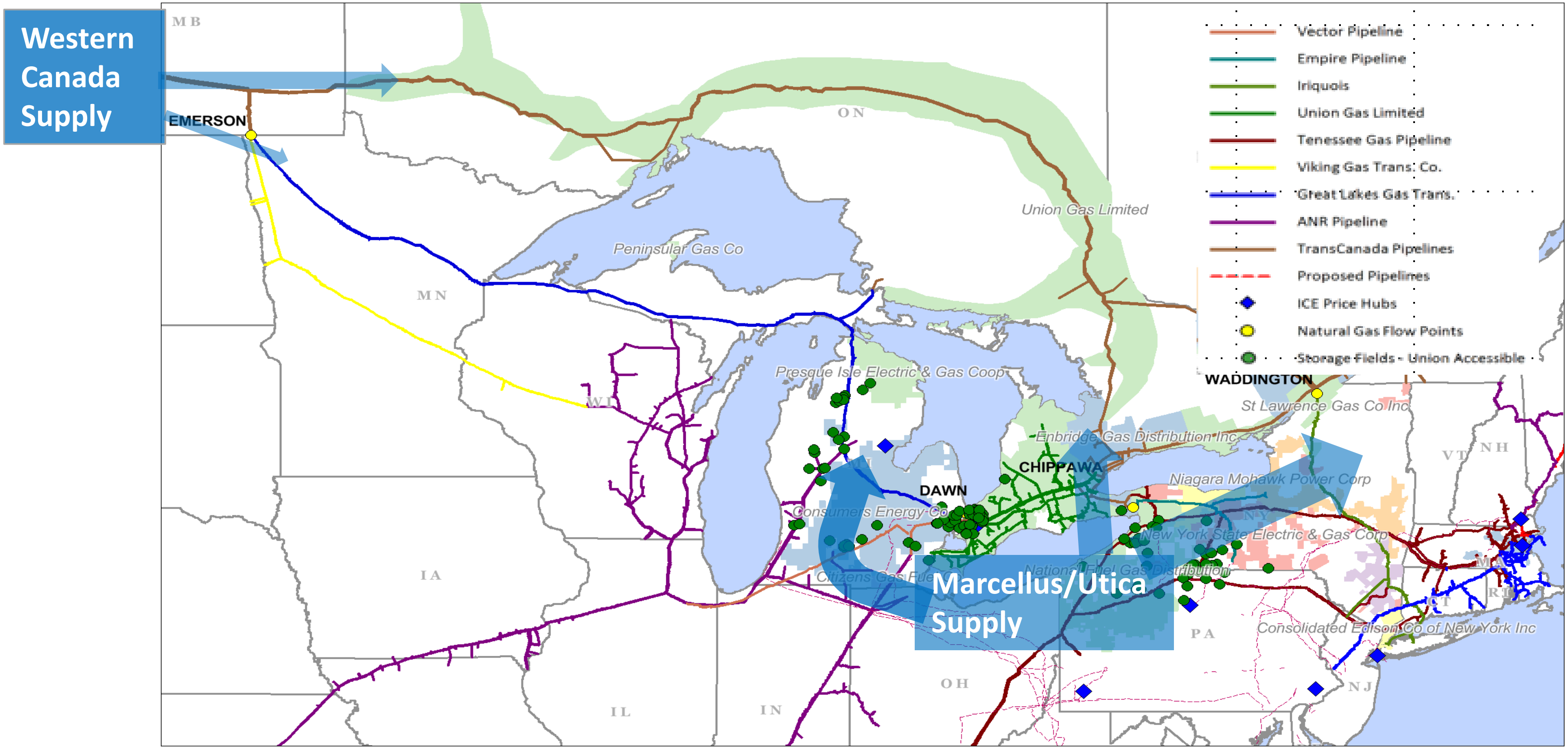
Pipeline	From	To	Capacity (MMcfd)	Year
To Ontario from Outside the Province				
TGP Niagara Expansion	New York	Niagara/Chippewa	158	2015
National Fuel	Leidy	Niagara	140	2015
TCPL Niagara Expansion	Niagara/Chippewa	Niagara Parkway	380	2016
Rover/Nexus	Marcellus/Utica	Vector Pipeline	1,050	2017
Within Ontario				
Enbridge GTA	Parkway	Maple	1,140	2015
TCPL Kings North	Parkway	Maple	347	2015
TCPL Niagara Expansion 2015	Niagara/Chippewa	Parkway	333	2015
Union 2015	Dawn	Parkway	690	2016
TCPL Niagara Expansion 2016	Niagara/Chippewa	Parkway	380	2016
Union 2016	Dawn	Parkway	460	2016
TCPL Vaughn Loop	Parkway	Maple	380	2016
Eastern Mainline Exp.	Parkway	Waddington/Iroquois	550	2017
TCPL 2017	Parkway	Maple	348	2017
To Northeast/New England				
Constitution	Northeast Pennsylvania	Wright, New York	650	2016
AIM (Algonquin)	New York	New England	342	2016
TGP Connecticut	New York	New England	72	2016
Atlantic Bridge	Marcellus Interconnections	New England & Maritimes	300	2017
Access Northeast/Northeast Energy Direct	Marcellus Interconnections	New England	1,000	2018

Traditional Sources of Gas Supply for Ontario



- **Supplies into Ontario from Alberta and the U.S. Midcontinent and Gulf Coast have historically satisfied Ontario's gas demand.**

Future Supply Sources for Ontario



- **Traditional supplies will be backed out by Marcellus and Utica gas flowing into Ontario through Dawn and Niagara/Chippewa.**

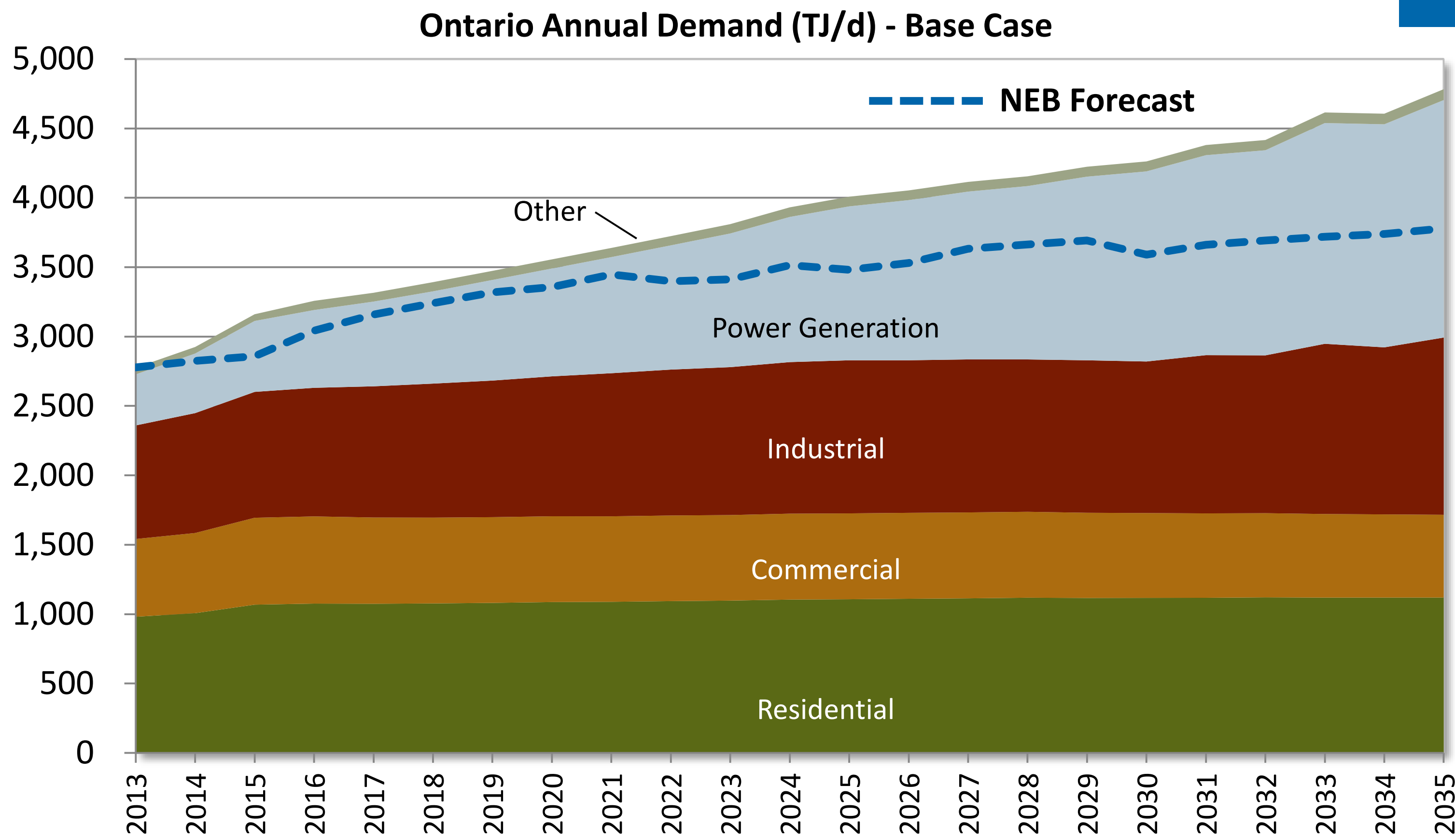
Model Results

Base Case (with Energy East)
Without EE Case (without Energy East)

Scenarios Applied to Estimate the Gas Price Impacts of Energy East

- **Two cases have been applied to evaluate the impacts of Energy East.**
  - Base Case – **includes** both Energy East and the Eastern Mainline Expansion.
  - Without EE Case – **excludes** Energy East and the Eastern Mainline Expansion.
  - Both cases include the other proposed pipeline expansions through 2018 listed on Slide 10.
- **Both cases rely on ICF's forecast of gas demand in Ontario.**
  - As noted above, ICF assumes a longer time to complete the nuclear plant refurbishments than is anticipated by the NEB, resulting in higher gas use in Ontario's power sector than in NEB's forecast.
  - However, ICF has also completed a sensitivity case that assumes NEB's projected gas use, in order to assess whether lower gas use in Ontario has a meaningful impact on the results.
- **The following slides compare the two cases in terms of:**
  - Pipeline flows
  - Gas prices
  - Gas price basis

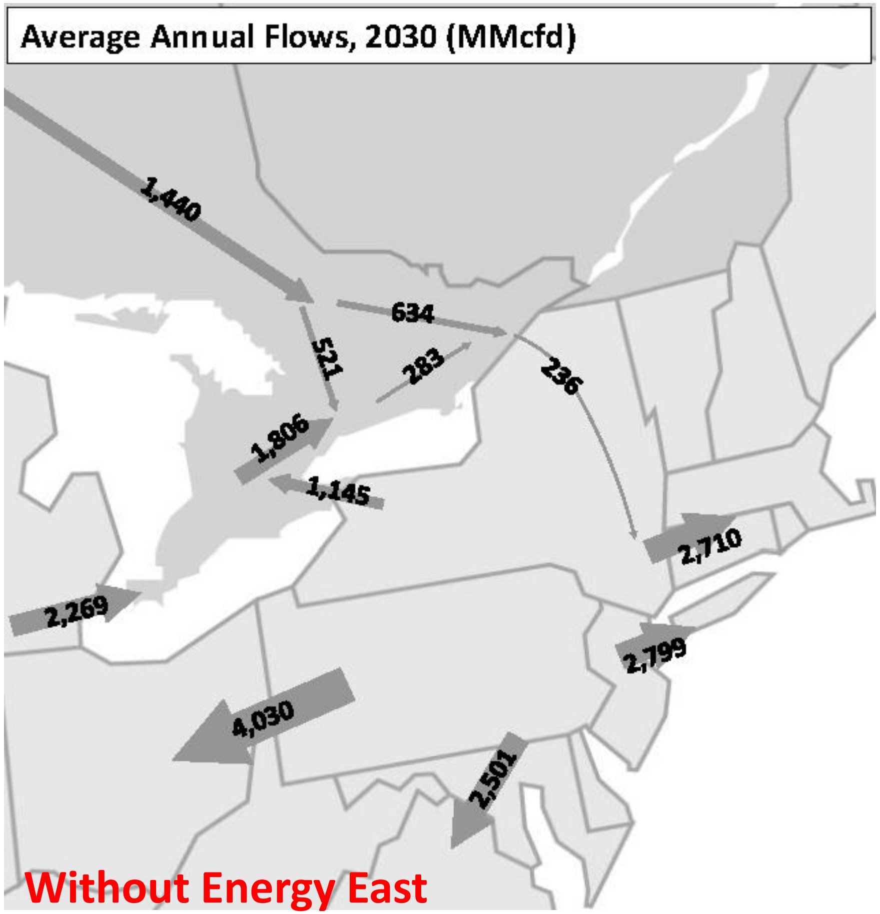
ICF's Base Case Forecast for Gas Use

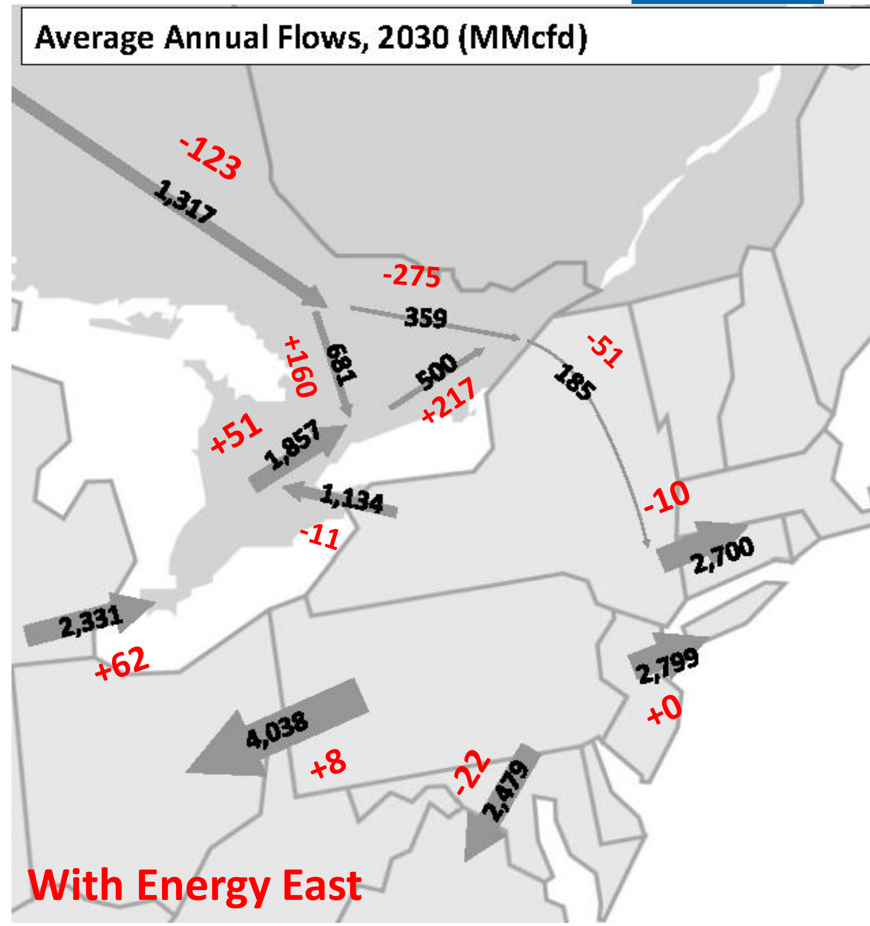


NEB Forecast Source: "Canada's Energy Future 2013 - Energy Supply and Demand Projections to 2035" - NEB

- In Ontario, demand growth is led by the power sector, with coal retirements and a slower return of nuclear units to service.
- The NEB and ICF forecasts are similar through 2020, but diverge in later years, as NEB projects a faster return of nuclear units.

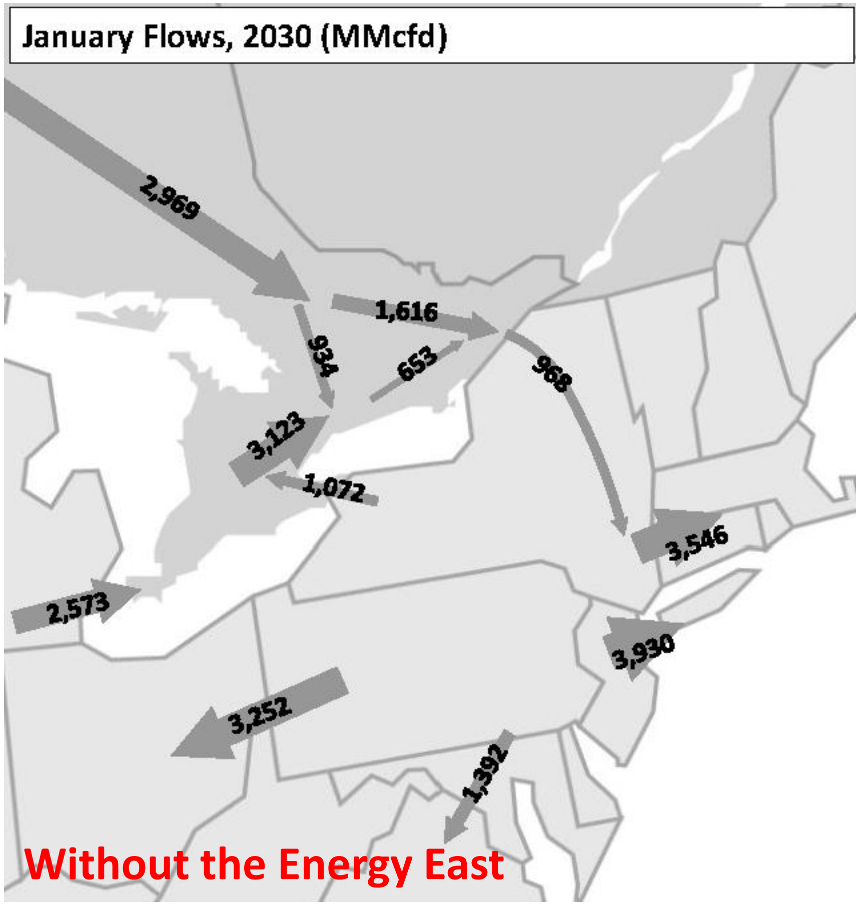
Average Annual Pipeline Flows in 2030 Without and With Energy East

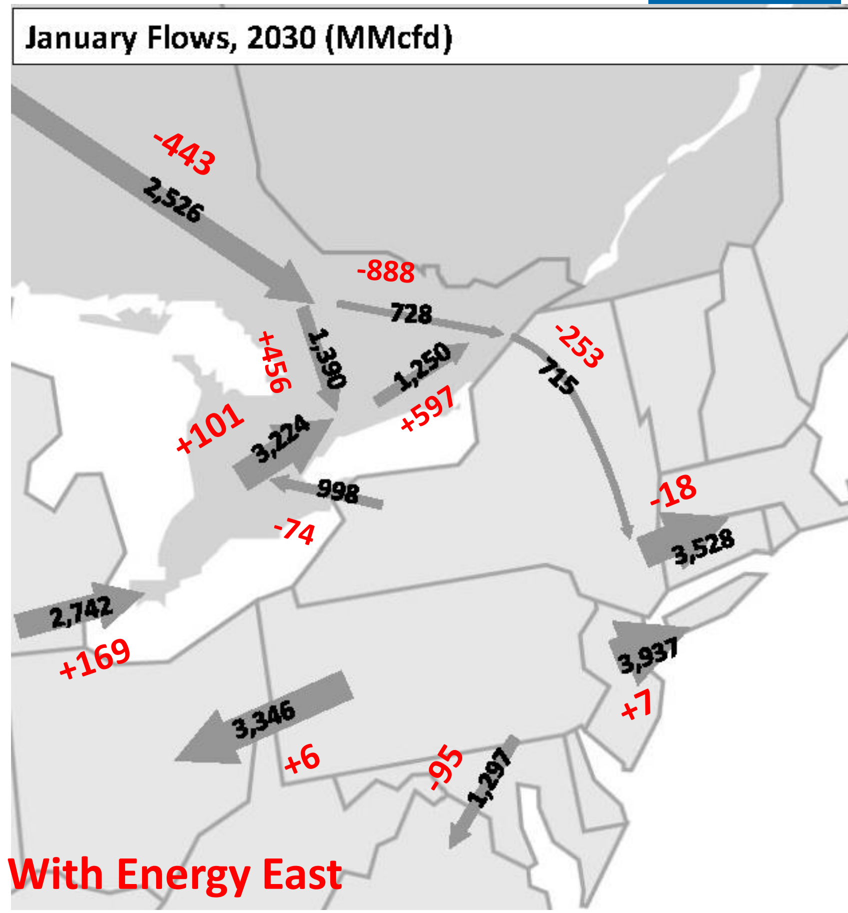




- Annual flows on TCPL into and across Ontario are greater in the case that does not include Energy East.
- Annual flows from Iroquois/Waddington towards NYC on Iroquois pipeline continue with Energy East, and are significant.
- With Energy East, flow from Parkway to Maple increases as incremental infrastructure within the EOT is relied on to a greater extent.

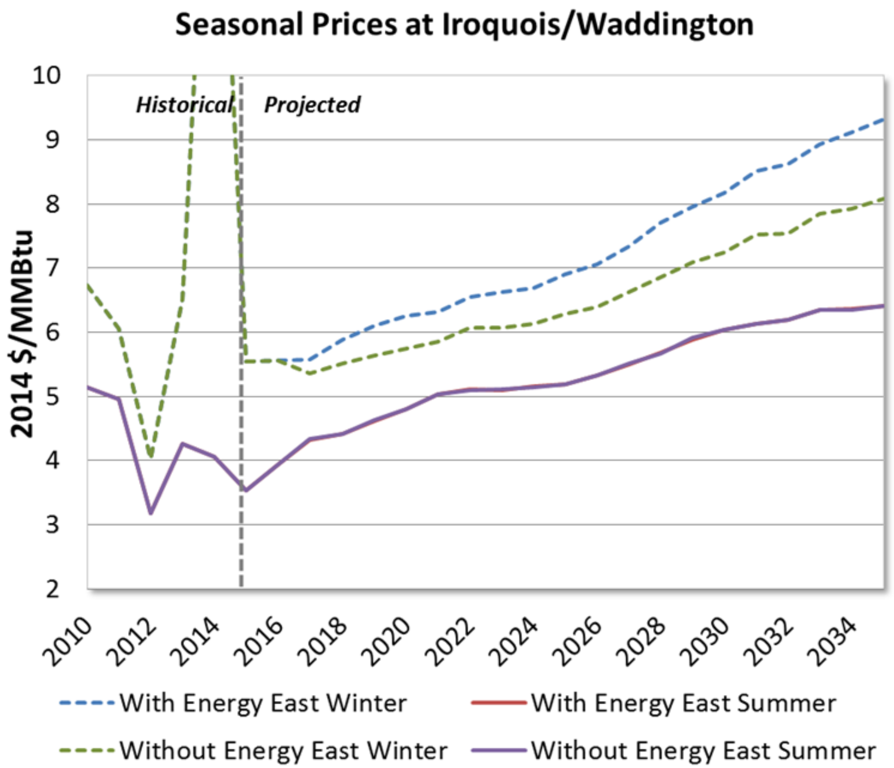
Pipeline Flows in January 2030 Without and With Energy East

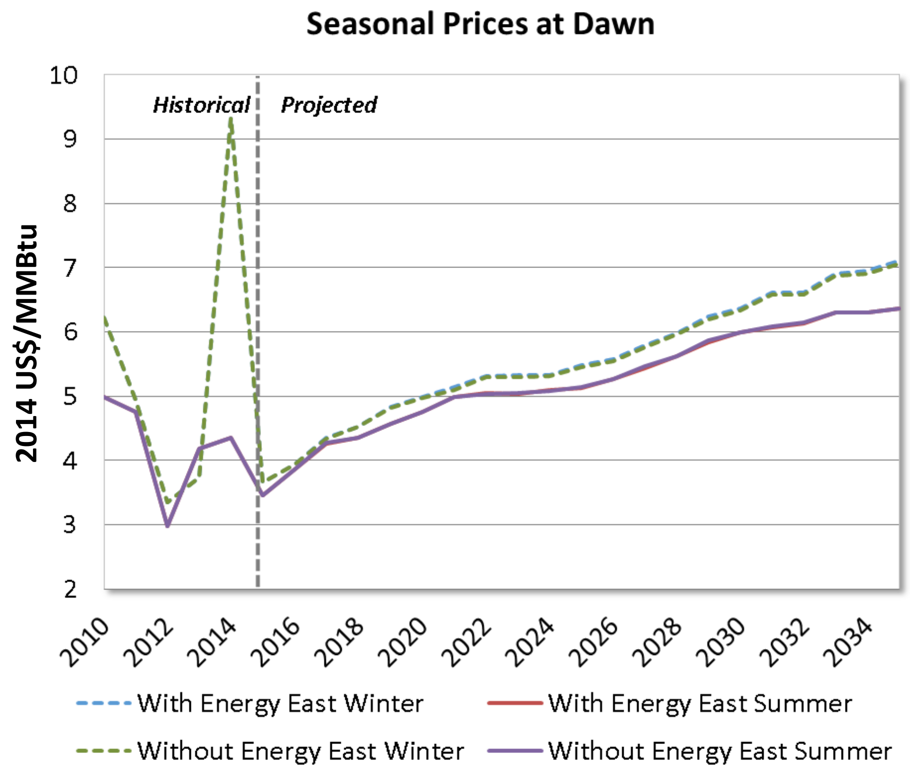




- Like the annual flows, January flows on TCPL into and across Ontario are lower in the case that includes Energy East.
- As the annual flows showed, Energy East reduces flows from Iroquois/Waddington towards NYC on Iroquois pipeline. Nonetheless, the flows remain significant.
- With Energy East, January flows from Parkway to Maple increase, and the capacity on this route is more highly utilized to replace gas transport capacity that is removed from service with Energy East.

Summarizing Seasonal Price Trends from the Scenarios





- The price impact of Energy East is concentrated in the winter – summer price impacts are minimal.
- The average gas price impact at Iroquois/Waddington during peak winter months (December through February) is $0.69/MMBtu from 2016-35, a 10% increase in winter prices.
- The price impact at Dawn during the winter is much less at only $0.03/MMBtu – this is better shown in the tabular results provided on the next two pages.
  - Dawn has an abundance of storage and direct access to supplies that reduce price impacts.

Tabular Price Results from the Cases – Price Comparison at Iroquois/Waddington

(2014 US$/MMBtu)

		2016	2017	2018	2019	2020	2021	2025	2030	2035	Avg. 2016-35
Annual	**Without EE**	4.47	4.76	4.83	5.04	5.18	5.37	5.64	6.49	6.96	5.82
	With EE	4.47	4.80	4.92	5.14	5.31	5.49	5.79	6.72	7.29	6.00
	Difference	*0.00*	*0.04*	*0.09*	*0.10*	*0.13*	*0.12*	*0.15*	*0.23*	*0.33*	*0.18*
	% Diff.	***0.1%***	***0.9%***	***1.9%***	***2.2%***	***2.5%***	***2.1%***	***2.7%***	***3.6%***	***4.7%***	***3.0%***
Winter* (Dec-Feb)	**Without EE**	5.56	5.36	5.52	5.64	5.75	5.85	6.28	7.24	8.09	6.57
	With EE	5.56	5.57	5.88	6.10	6.26	6.31	6.90	8.17	9.32	7.26
	Difference	*0.00*	*0.21*	*0.36*	*0.46*	*0.51*	*0.46*	*0.62*	*0.93*	*1.23*	*0.69*
	% Diff.	***0.0%***	***3.9%***	***6.6%***	***8.1%***	***8.9%***	***7.8%***	***9.9%***	***12.9%***	***15.3%***	***10.5%***
Summer (May-Sep)	**Without EE**	3.94	4.34	4.41	4.63	4.81	5.04	5.19	6.04	6.41	5.38
	With EE	3.94	4.33	4.41	4.61	4.80	5.03	5.19	6.04	6.41	5.38
	Difference	*0.00*	*-0.01*	*0.00*	*-0.02*	*-0.01*	*-0.01*	*0.00*	*0.00*	*0.00*	*0.00*
	% Diff.	***-0.1%***	***-0.3%***	***-0.1%***	***-0.3%***	***0.0%***	***-0.1%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***
Design Day (January)	**Without EE**	30.13	29.04	29.91	30.58	31.14	31.71	34.04	39.26	43.83	35.60
	With EE	30.13	30.18	31.89	33.06	33.91	34.19	37.40	44.30	50.53	39.35
	Difference	*0.00*	*1.14*	*1.98*	*2.48*	*2.77*	*2.48*	*3.36*	*5.04*	*6.70*	*3.75*
	% Diff.	***0.0%***	***3.9%***	***6.6%***	***8.1%***	***8.9%***	***7.8%***	***9.9%***	***12.9%***	***15.3%***	***10.5%***

*The Average Winter price in a year includes the December price of the prior year; for example, the 2020 Winter price is an average of the December 2019, January 2020, and February 2020 prices. Annual prices run from November to October. The design day price provides an "indicative value" for a design day, estimated by applying the ratio of the observed peak day price to the average winter price from the 2013-14 winter.

- At Iroquois/Waddington, the Energy East project increases the annual average price by $0.18/MMBtu and the winter price by $0.69/MMBtu between 2016-35. The impact on summer prices is negligible.
- With Energy East, peak day prices at Iroquois/Waddington (which occur in January) increase by nearly $4/MMBtu.
    - While most gas consumed in Ontario is not purchased at the Iroquois/Waddington price, this price represents a proxy for the value of natural gas and the impact of pipeline constraints on the EOT downstream of Maple.

Tabular Price Results from the Cases – Price Comparison at Dawn

(2014 US$/MMBtu)

		2016	2017	2018	2019	2020	2021	2025	2030	2035	Avg. 2016-35
Annual	Without EE	3.95	4.39	4.48	4.74	4.90	5.11	5.35	6.17	6.62	5.50
	With EE	3.95	4.39	4.49	4.75	4.91	5.12	5.35	6.17	6.64	5.51
	Difference	*0.00*	*0.00*	*0.01*	*0.01*	*0.01*	*0.01*	*0.00*	*0.00*	*0.02*	*0.01*
	% Diff.	***0.0%***	***0.0%***	***0.1%***	***0.1%***	***0.2%***	***0.2%***	***0.1%***	***0.0%***	***0.3%***	***0.1%***
Winter* (Dec-Feb)	Without EE	3.94	4.34	4.52	4.81	4.97	5.10	5.45	6.33	7.06	5.64
	With EE	3.94	4.35	4.53	4.84	4.99	5.14	5.48	6.36	7.10	5.67
	Difference	*0.00*	*0.01*	*0.01*	*0.03*	*0.02*	*0.04*	*0.03*	*0.03*	*0.04*	*0.03*
	% Diff.	***0.0%***	***0.2%***	***0.3%***	***0.5%***	***0.4%***	***0.7%***	***0.6%***	***0.5%***	***0.7%***	***0.5%***
Summer (May-Sep)	without EE	3.86	4.27	4.35	4.57	4.76	4.99	5.14	6.00	6.37	5.33
	With EE	3.86	4.27	4.35	4.56	4.75	4.98	5.13	5.99	6.36	5.32
	Difference	*0.00*	*0.00*	*0.00*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*	*-0.01*
	% Diff.	***0.0%***	***-0.1%***	***-0.1%***	***-0.3%***	***0.0%***	***-0.1%***	***-0.1%***	***-0.2%***	***-0.2%***	***-0.1%***
Design Day (March)	Without EE	24.88	27.45	28.54	30.43	31.41	32.25	34.43	40.01	44.61	35.66
	With EE	24.88	27.49	28.62	30.57	31.54	32.49	34.63	40.21	44.90	35.83
	Difference	*0.00*	*0.04*	*0.07*	*0.14*	*0.12*	*0.24*	*0.20*	*0.20*	*0.29*	*0.17*
	% Diff.	***0.0%***	***0.2%***	***0.3%***	***0.5%***	***0.4%***	***0.7%***	***0.6%***	***0.5%***	***0.7%***	***0.5%***

*The Average Winter price in a year includes the December price of the prior year; for example, the 2020 Winter price is an average of the December 2019, January 2020, and February 2020 prices. Annual prices run from November to October. The design day price provides an "indicative value" for a design day, estimated by applying the ratio of the observed peak day price to the average winter price from the 2013-14 winter.

- The Energy East project does not affect Dawn prices significantly, as Dawn has direct access to a robust storage resource and more direct access to Midcontinent and Marcellus gas supplies.

Gas Price Basis

2016-35 Average Basis (2014 US$/MMBtu)

		Marcellus Versus Henry Hub	AECO Versus Henry Hub	Dawn Versus Henry Hub	Marcellus to Dawn	AECO to Dawn	Waddington Versus Henry Hub	Marcellus to Waddington	AECO to Waddington	Dawn to Waddington
Annual	**Without EE**	-1.04	-0.85	0.00	1.04	0.85	0.32	1.35	1.17	0.32
	With EE	-1.03	-0.87	-0.01	1.03	0.87	0.49	1.53	1.36	0.49
	Difference	*0.01*	*-0.02*	*-0.01*	*-0.01*	*0.02*	*0.17*	*0.18*	*0.19*	*0.17*
	% Diff.	**-**	***2.1%***	**-**	**-**	***2.9%***	***55.3%***	***12.9%***	***16.6%***	***52.7%***
Winter* (Dec-Feb)	**Without EE**	-0.96	-0.82	0.28	1.24	1.09	1.20	2.16	2.02	0.93
	With EE	-0.96	-0.87	0.30	1.26	1.17	1.89	2.85	2.76	1.59
	Difference	*0.00*	*-0.05*	*0.02*	*0.02*	*0.08*	*0.69*	*0.69*	*0.74*	*0.66*
	% Diff.	**-**	***6.2%***	***8.5%***	***1.3%***	***6.8%***	***57.3%***	***31.4%***	***36.6%***	***71.8%***

*The Average Winter price in a year includes the December price of the prior year; for example, the 2020 Winter price is an average of the December 2019, January 2020, and February 2020 prices. Annual prices run from November to October.

- Energy East increases the annual basis from Dawn to Iroquois/Waddington by about 50% and the winter basis by about 70%, on average.

Impact of Alternative Demand Assumption

- ICF has completed a sensitivity case (with and without Energy East) to assess the price impacts at a lower level of natural gas demand, consistent with NEB's demand forecast for Ontario.
- With lower demand, both Dawn and Iroquois/Waddington prices are reduced by about $0.10/MMBtu, on average, from 2016 through 2035 (relative to the Base Case prices).
- However, the annual, seasonal, and peak day price differences observed with and without Energy East are very similar to the differences shown in the tables and charts presented on the prior slides. So, roughly the same price impacts occur even with lower growth in Ontario's gas use.

Review of Other Studies

Other Studies Reviewed

- **Wood Mackenzie**
  - Presentation to the OEB on behalf of Union Gas (dated January 29, 2015).
  - Report for Société en commandite Gaz Métro and Gazifère Inc. (September 2, 2014). [Not covered here, as this report is based on an older version of the Wood Mackenzie modeling work].
- **Concentric Energy Advisors**
  - Testimony by John Reed on behalf of TransCanada in October 2014, submitted as Appendix Volume 1-2 of TransCanada's Energy East Project and Asset Transfer Applications to the NEB.
  - Report submitted to the Régie de L'énergie Du Québec at the request of TransCanada on natural gas market assessment in Quebec (September 23, 2014).
  - Presentation to the Régie de L'énergie Du Québec at the request of TransCanada on natural gas market assessment in Quebec (October 7, 2014).
- **KPMG**
  - Report to the Régie for Gaz Métro (October 28, 2014).

Wood Mackenzie January 2015 Presentation – Key Assumptions

- **Marcellus/Utica gas production is expected to more than double from current production by 2025, with an increase in volume that will flow into Canada.**
  - Ontario is expected to satisfy roughly half of its gas needs from the Marcellus/Utica by 2017, with the share increasing to about 80% by 2020, limiting the need for WCSB gas, as well as other sources.
  - Quebec is expected to source about half of its gas needs from WCSB and the rest from Marcellus by 2020, in contrast to over 90% being sourced from WCSB at present.
- **Ontario's gas demand outlook is consistent with NEB estimates, with power generation demand growing steadily until 2021. Nuclear refurbishments in the 2020s reduce gas demand from its peak in 2021 by at least 100 MMcfd by 2030.**
- **Overall, gas demand in Ontario is expected to increase by 640 MMcfd by 2030 (compared to today's level) and in Quebec by 120 MMcfd by 2030.**

Wood Mackenzie January 2015 Presentation – Energy East Impacts

- **Energy East (EE) and the Eastern Mainline Project (EMP) are expected to reduce EOT capacity by about 0.6 PJ/d, with the Prairies Line capacity dropping by 1.3 PJ/d and the Northern Ontario Line dropping by 1.5 PJ/d.**
- **There are no material impacts on the markets served by the Prairies and Northern Ontario Line.**
- **Flows in the Eastern Ontario Triangle during the winter of 2013-14 exceeded the proposed capacity that will remain after the Energy East project, indicating the competitive pressure between Ontario and New England.**
- **Not all peak day markets using the EOT can be served in a scenario with Energy East.**
- **With EE/EMP, the average peak month price in January 2018 will be $2.70/MMBtu greater than a case that excludes EE/EMP. The peak month difference will drop to about $0.40/MMBtu in January 2022. The average winter prices will increase by about $1.00/MMBtu in 2017-18, dropping to roughly $0.30/MMBtu over the next four winters.**
  - *These differences are directionally consistent with the differences in ICF's modeling, but Wood Mackenzie also projects a significant summer difference that ICF does not project.*

Concentric Report/Presentation to Quebec Regie

- **Concentric's Régie report and presentation do not provide any natural gas price impact assessments of the Energy East project in Ontario or Quebec.**
  - Concentric has relied on NEB and EIA forecasts and the futures market as a general indication for expected prices, rather than developing its own assessment of prices.
- **Concentric estimates incremental capacity requirements of about 80 MMcfd through 2030 for Quebec. Demand for the IFFCO plant and the Bécancour power plant are included in the EMP, as they have firm contracts with TransCanada.**
- **Concentric notes that this incremental demand can be met by:**
  - Potential expiration and non-renewal of existing firm capacity contracts on the Eastern Triangle by customers in the northeast U.S. that will have additional sources of gas to consider;
  - Shale gas production in Québec and from existing and proposed LNG peakshaving facilities in Quebec;
  - Contracting for pipeline capacity on proposed projects to deliver Marcellus/Utica gas into Dawn, Iroquois/Waddingon, Niagara, and Chippawa.

John Reed’s Testimony – Key Extracts

Reed’s Testimony concludes that Energy East would have a limited impact on firm service customers in Ontario. His testimony does not address the potential natural gas price impacts of the Energy East project on Ontario or the impact on interruptible or secondary market customers in Ontario.

- **“Considering the existing and projected market circumstances, there is a very low probability that there would be a shortage of Mainline capacity from the WCSB in the future if the Conversion Facilities are transferred to oil service.” (Page 42 of 97)**
- **“Total firm service requirements in the Eastern Triangle are not expected to increase, with growth in domestic LDC and power generation markets largely being offset by reductions in export markets.” (Page 42 of 97)**
- **“TransCanada expects to have sufficient capacity to continue meeting its firm service requirements on the Prairies Line and the Northern Ontario Line, without any facilities additions, after the transfer of the Conversion Facilities is completed.” (Page 43 of 97)**
- **“TransCanada has estimated its firm requirements on the basis that all of the firm contracts currently in place in the Eastern Triangle that have renewal rights do in fact renew, and that capacity will be required to meet the firm requirements from the results of the 2016 NCOS.” (Page 43 of 97) Based on this approach, TransCanada has estimated a shortfall of 575 TJ/d of capacity in the Triangle, which will be made up by the EMP.**
- **“Interruptible shippers make no long-term commitment to cost recovery, paying only when they actually use the facilities. It is uneconomic to build, operate, and maintain facilities that would not be expected to be used on a regular basis and with no reasonable assurance of longer-term cost recovery.” (Page 45 of 97) Concentric has argued that meeting interruptible demand is not a relevant consideration.**

KPMG-SECOR

- **Report to the Régie for Gaz Métro on potential economic losses to Quebec from Energy East and the reduction of pipeline capacity available through the EOT to Quebec.**
- **Focuses on the effects on six potential gas-intensive projects in Quebec from reduced access to supply.**
  - Limitations on access would result in higher gas cost and greater project risk, thus reducing project economics.
  - Making the projects less viable would reduce potential employment . . .
  - And reduce tax income to the provincial and federal governments . . .
  - And affect exports and balance of payments.
- **KPMG-SECOR does not estimate a price impact.**

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