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VIA RESS and EMAIL

June 27, 2024

Nancy Marconi
Registrar
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, Ontario
M4P 1E4

Dear Nancy Marconi:

Re: EB-2024-0067 – Enbridge Gas Inc. (Enbridge Gas)
2024 Annual Update to 5-Year Gas Supply Plan - Compendium

Enclosed with this letter is a Compendium containing materials for the July 2nd/3rd Stakeholder Conference for the Enbridge Gas 2024 Annual Update to its 5-Year Gas Supply Plan. As directed in the Ontario Energy Board's (OEB) letter of April 15, 2024, Enbridge Gas aims to answer the written stakeholder questions at the Stakeholder Conference. For convenience, the Agenda for the Stakeholder Conference is included at Tab 1 of the Compendium. Please note, that based on the questions received, Enbridge Gas is anticipating that only 1 day will be needed to cover all of the relevant material. If necessary, Enbridge Gas is prepared to sit beyond 4:30, if it makes sense to do so to save parties from having to reconvene for a 2nd day.

While preparing for the Stakeholder Conference, Enbridge Gas recognized a few updates that were needed to the Annual Update previously filed. An updated version of Annual Update to the 5-Year Gas Supply Plan has been filed with the OEB.

Tab 2 of the Compendium includes a copy of the presentation that Enbridge Gas will give at the Stakeholder Conference. The presentation sets out the main topic areas and key points that will be discussed. Enbridge Gas's gas supply team representatives will lead a discussion based on the presentation. The presentation will include more details on items noted in the presentation slides. Through the presentation, Enbridge Gas will answer all of the prefiled stakeholder questions that are in scope for this consultation process. [1] There will be opportunity for additional questions and answers for each topic covered in the presentation. Note, however, that consistent with the process followed for the 5-Year Gas Supply Plan Stakeholder Conference process,

[1] The questions that Enbridge Gas has identified as being out of scope are related to confidential information, and information requests, reports or analysis that are not part of the gas supply planning process. Additionally, FRPO.1 requests significant amount of data which Enbridge Gas feels is best suited for the Phase 2 rebasing proceeding. As a result, Enbridge Gas will include the response to this question with the FRPO interrogatories to be filed in the concurrent Phase 2 rebasing proceeding (EB-2024-0111).

Enbridge Gas does not intend to give undertakings to answer further questions that cannot be answered over the course of the Stakeholder Conference.

Enbridge Gas's gas supply team representatives for the presentation will be Amy Mikhaila (Director, Gas Supply), Dave Janisse (Manager, Gas Supply Acquisition) and Steve Dantzer (Supervisor, Gas Supply Planning). CVs for each of the Enbridge Gas representatives are included at Tab 3 of the Compendium.

Should you have any questions on this matter please contact the undersigned.

Sincerely,

Richard Wathy

Richard Wathy
Technical Manager, Regulatory Applications

cc: David Stevens, Aird & Berlis LLP

EB-2024-0067 - 2024 Annual Update to 5 Year Gas Supply Plan

Enbridge Gas Inc. – Stakeholder Conference Compendium

Tab 1 – Stakeholder Conference Agenda

Tab 2 – Presentation

Tab 3 – Curriculum Vitae

- Amy Mikhaila (Director, Gas Supply)
- Dave Janisse (Manager, Gas Supply Acquisition)
- Steve Dantzer (Supervisor, Gas Supply Planning)

TAB 1

Stakeholder Conference Agenda: Consultation to Review 2024 Annual Update to Five-Year Natural Gas Supply Plans (EB-2024-0067)

Date/Time: July 2, 2024
9:30 am - 4:30 pm

Location: Zoom Call Hosted by Ontario Energy Board

9:30 – 9:45	**Welcome Remarks (OEB Staff)**
9:45 – 10:30	**Stakeholder Conference Introduction**
	• Conference Scope, Format & Approach
	• 2024 Highlights & Agenda
	• Guiding Principles, Planning Process, Scope
	Market Update
	• Market Update
	• Transportation Scarcity
	• Upstream Transportation Availability
10:30 – 11:00	**Q&A**
11:00 – 11:15	Morning Break
11:15 – 11:30	**Demand**
	• Demand Forecast – Annual & Design Day
	• Design Day and Average Day Position
11:30 – 11:50	**Q&A**
11:50 – 12:35	Lunch Break
12:35 – 1:35	**Portfolio and Transportation Contracting Changes**
	• Supply & UDC
	• Storage
	• Design day outcomes & third-party peaking services
	• Pipeline Renewals & Purchases
1:35 – 2:20	**Q&A**
2:20 – 2:35	Afternoon Break
2:35 – 3:05	**Public Policy**
	• Responsibly Sourced Gas
	• Renewable Natural Gas
	• Hydrogen
3:05 – 3:35	**Q&A**
3:35 – 3:55	**Historical Review and Performance Metrics**
	• Three-Year Historical Review
	• Transportation Portfolio Term
	• Curtailments
	• Public Policy
3:55 – 4:15	**Q&A**
4:15 – 4:30	**Wrap-Up & Next Steps (OEB Staff)**

TAB 2

2024 Annual Gas Supply Plan Update

Amy Mikhaila, Dave Janisse and Steve Dantzer
Enbridge Gas

Introduction

Stakeholder conference scope

- The annual Gas Supply Plan Update, as outlined by the Ontario Energy Board (OEB)[1]:
  - Is an important tool for distributors to identify significant events that result in a change to the gas supply plans.
  - Will primarily focus on:
    - > Updates to the Outlook section of the gas supply plan;
    - > A description of significant changes from previous updates and;
    - > A historical comparison of actuals to the Outlook.

- Costs are reviewed outside of this process:
  - QRAM
  - Annual rate and deferral applications
  - Rebasing

1 – Framework, p. 14

Stakeholder conference format and approach

- Informed by the OEB's guidance in Framework and Initiation letter dated April 15, 2024.
- Presentation and Q&A to address pertinent questions received.
- Agenda distributed ahead of time to allow parties to plan their participation.
- Withhold questions until the presentation regarding that topic is complete.
- Enbridge Gas is not seeking approval of the Annual Update.
  - The Annual Update is a requirement of the OEB's Framework for the Assessment of Distributor Gas Supply Plans.

Presentation

Presentation by Enbridge Gas regarding a specific topic

Q & A

Question and answer period regarding the specific topic

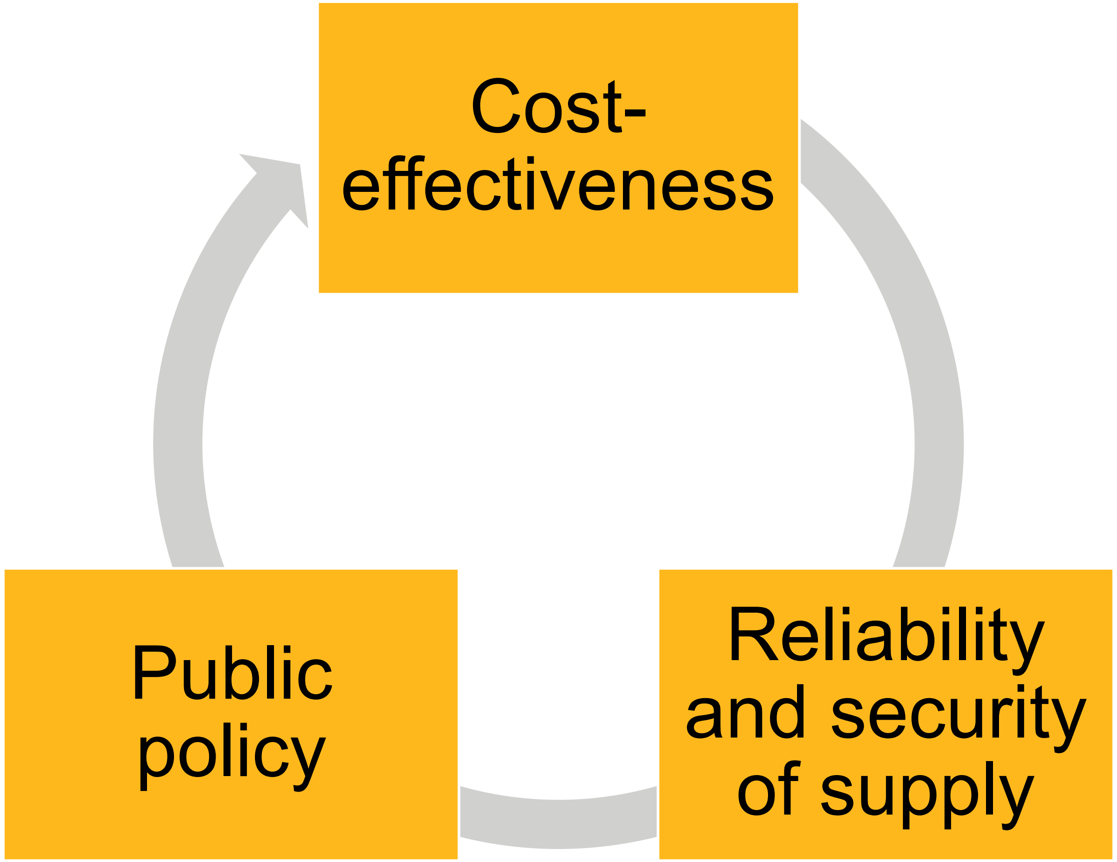
Proceed to Next Topic

Mindful of time per topic to ensure all topics and questions are addressed

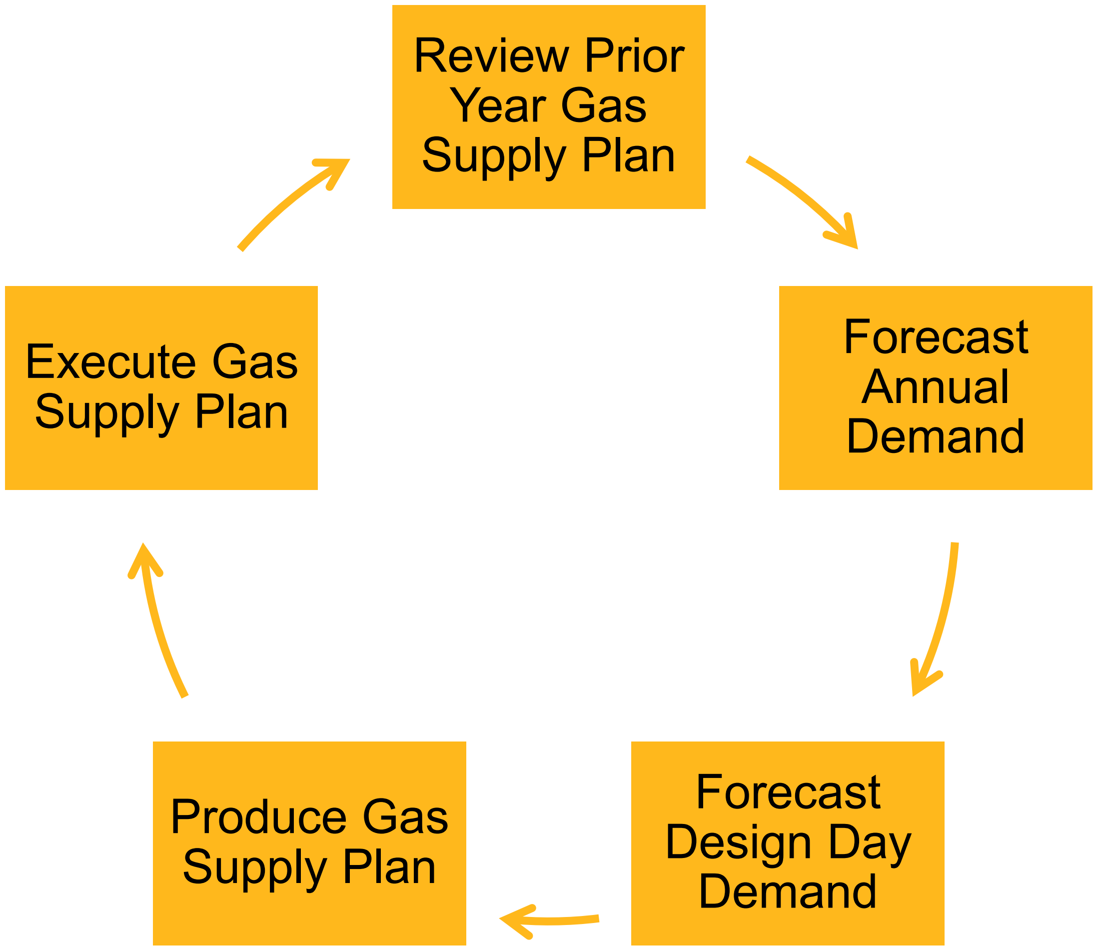
2024 highlights and agenda

- The 2024 Annual Gas Supply Plan Update presentation will discuss the following :
    1. Planning process and scope
    2. Market update
    3. Demand forecast
    4. Contracting changes
    5. RSG, RNG and Hydrogen
    6. Performance metrics

Guiding principles



Gas supply planning process



Rebasing Phase 1 Settlement Decision Received

In scope

- Information that is filed in the 2023/24 Annual Update
  - Market changes and general impacts
  - Demand forecast
  - Current portfolios
  - Contracting changes
  - Performance metrics

Out of scope

- Phase 1 decision
  - Harmonized design day methodology results or impacts
  - Revised volume forecasts (demand, UFG, etc.)
- Phase 2 application
  - Updated storage and load balancing costs
  - Harmonized methodology for determining, and the amount, of storage space and deliverability
  - Low-Carbon Energy Program
- Phase 3 application
  - Gas Cost Reference Price

Indigenous consultation

- Indigenous Peoples Policy (IPP)
  - Indigenous_peoples_policy_final.pdf (enbridge.com)
- Indigenous Reconciliation Action Plan (IRAP)
  - Enbridge_IRAP_September_2022.pdf

Future considerations

- Enbridge Gas recognizes the importance of emissions reduction in Ontario, as well as the important role that Enbridge Gas plays in supporting the achievement of greenhouse gas emissions reduction targets.
- The long-term future of gas demand out to 2050 is uncertain, the near-term demand is based on actual observed trends in energy consumption. As the supplier of last resort, Enbridge Gas must ensure that its gas supply plan is adequate to meet these immediate demands.
- Any changes to gas demand will be captured through the budget cycle and factored into the next annual gas supply plan.

Market Update

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Third-party forecasts

- The OEB framework requests current market conditions in Ontario and North America.
- Enbridge Gas files publicly available third-party information to help support this requirement.
- Enbridge Gas notes that the inclusion of publicly available forecasts from the U.S. Energy Information Administration (EIA) and the Canada Energy Regulator (CER) in the Update does not mean that Enbridge Inc. or its affiliates endorse, agree with or support the accuracy of these forecasts.
- The publicly available information related to North American forecast natural gas demand is not a direct input into the Gas Supply Plan.

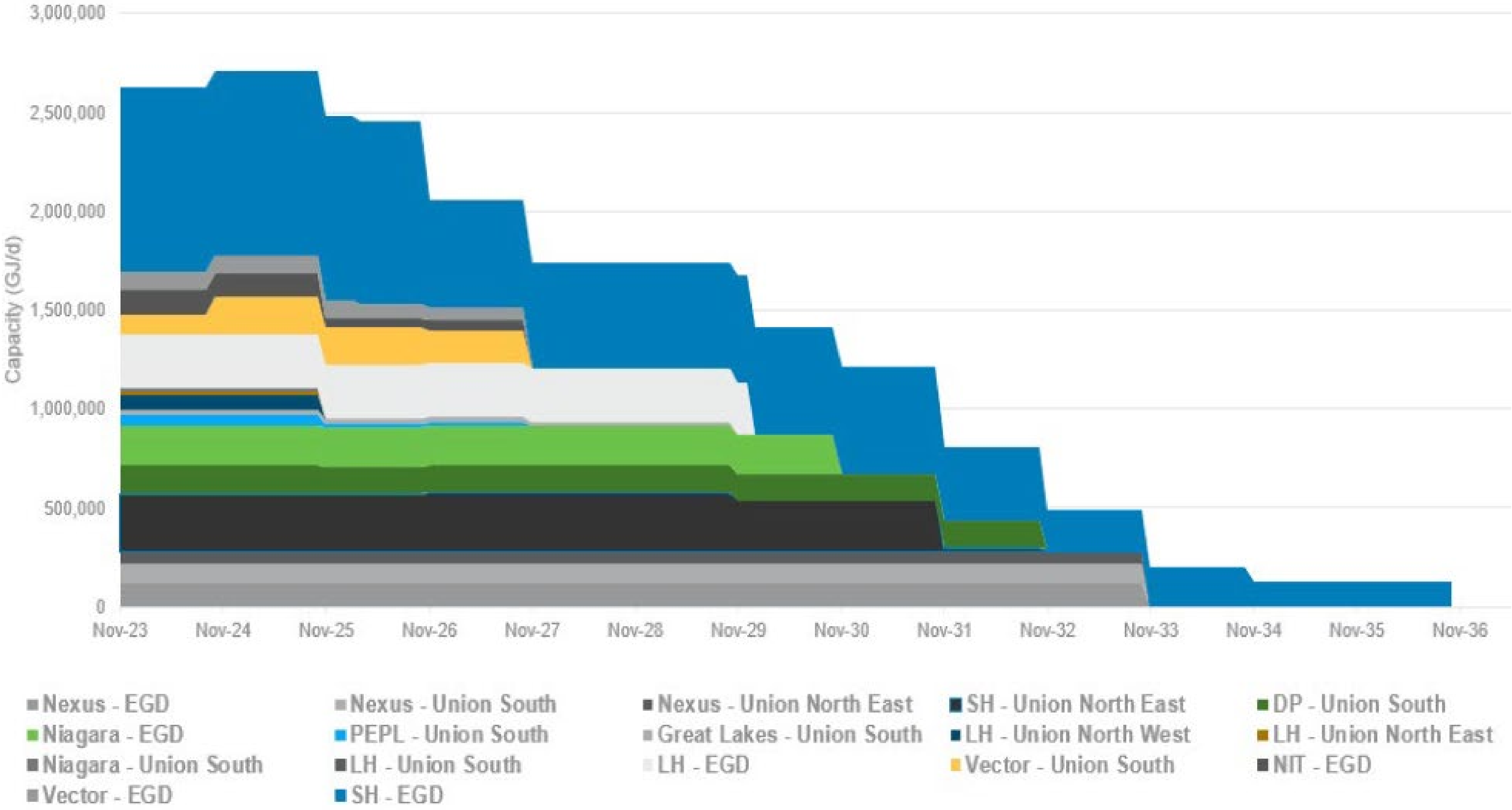
Market update

- Following the high prices and volatility that lasted from late 2021 to early 2023, the market has experienced relatively lower prices and greater stability for more than the last year.
- Increased global volatility in the energy market, driven by geopolitical factors, is still present, and global markets are more connected than before due to high levels of LNG exports from North America.
- But for more than the past year, North America's fundamentals have been driven largely by warm winter weather and the corresponding high inventory levels that have been present since early 2023 and have kept prices low.
- Only recently prices have started to trend back up with production levels dropping in a delayed response to the lower prices.

Transportation scarcity

- Shippers compete for available existing capacity.
  - Contracting decisions must consider longer term capacity needs.
  - Successful bidders for available capacity have been willing to contract for longer terms.
  - U.S. pipelines seeking longer renewal terms at maximum rates upon contract expiry.

Flexibility in the gas supply portfolio



Transportation scarcity example

As of April 2020

Table 1: Available Capacity[1]

Posted System Segments	FT Capacity (GJ/d) Starting November 1, 2020[3][5
Empress [2] to Domestic	
South Saskatchewan Delivery Area (SSDA)	376,875
Manitoba Delivery Area (MDA)	376,875
Western Delivery Area (WDA)	376,875
Northern Delivery Area (NDA)	376,875
Enbridge CDA	376,387
Union ECDA	339,000
Eastern Delivery Area (EDA)[4]	184,901
Eastern Delivery Area (Energir EDA)	0
Southwest Delivery Area (SWDA)	0

As of May 2024

Table 1: Available Capacity[1]

Posted System Segments	FT Capacity Starting April 2024 (GJ/d)	FT-NR Capacity Starting April 2024 (GJ/d)
Empress[3] to (Domestic)[4]		
South Saskatchewan Delivery Area (SSDA)	0	0
Manitoba Delivery Area (MDA)	0	0
Western Delivery Area (WDA)	0	0
Northern Delivery Area (NDA)	0	0
Enbridge CDA	0	0
Union ECDA	0	0
Eastern Delivery Area (EDA)[6]	0	0
Eastern Delivery Area (Energir EDA)	0	0
Southwest Delivery Area (SWDA)	0	0

Upstream transportation availability

Company	Path	Available capacity Y/N
Great Lakes	Emerson II to Union SWDA	N
Vector	Chicago to Dawn	N
DTE	MichCon to St. Clair	N
NEXUS	Marcellus to Dawn	Y
Rover	Marcellus to Dawn	Y
PEPL	Various to Ojibway	Y
Rover	Marcellus to Dawn	N
TCPL	Empress to Emerson	N
TCPL	Empress to EGI delivery areas (long-haul)	N
TCPL	Parkway to EGI delivery areas (short-haul)	N
TCPL	Dawn to Union SSMDA	N

*as of November 1, 2024

Q&A

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Demand Forecast

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Annual demand forecast

- Forecast is based on OEB-approved methodologies
- 2023 includes $65/tCO_2e carbon price
  - Assumes escalating rates of $15/tCO_2e per year until reaching $170/tCO_2e in 2030

Line No.	Particulars (TJ)	2023/24	2024/25	2025/26	2026/27	2027/28
		(a)	(b)	(c)	(d)	(e)
	EGD					
1	General Service	382,674	383,499	384,574	385,774	387,047
2	Contract	73,285	73,185	72,592	72,000	71,408
3	Total EGD	455,959	456,684	457,166	457,774	458,455
	Union North West					
4	General Service	14,762	14,823	14,859	14,856	14,926
5	Contract	1,775	1,772	1,769	1,767	1,765
6	Total Union North West	16,537	16,595	16,628	16,623	16,691
	Union North East					
7	General Service	37,664	37,812	37,957	38,017	38,170
8	Contract	3,682	3,674	3,667	3,660	3,654
9	Total Union North East	41,346	41,486	41,624	41,677	41,824
	Union South					
10	General Service	172,047	170,795	170,222	169,817	170,252
11	Contract	60,024	59,923	59,802	59,678	59,554
12	Total Union South	232,071	230,719	230,025	229,495	229,805
13	Total Demand Forecast	745,912	745,483	745,443	745,570	746,775

EGD rate zone design day position

Line No.	Particulars (TJ/d)	EGD CDA 2023/24 (a)	EGD CDA 2024/25 (b)	EGD CDA 2025/26 (c)	EGD CDA 2026/27 (d)	EGD CDA 2027/28 (e)	EGD EDA 2023/24 (f)	EGD EDA 2024/25 (g)	EGD EDA 2025/26 (h)	EGD EDA 2026/27 (i)	EGD EDA 2027/28 (j)
	Demand										
1	Gross Demand	3,449	3,459	3,470	3,482	3,493	748	755	762	768	775
2	Curtailment	(71)	(71)	(71)	(71)	(71)	(26)	(26)	(26)	(26)	(26)
3	Net Demand	3,378	3,389	3,400	3,411	3,422	723	729	736	742	749
	Supply Asset										
4	TCPL Long-haul	5	5	5	5	5	260	260	260	260	260
5	TCPL Short-haul	768	787	787	787	787	368	368	368	368	368
6	TCPL STS	284	284	284	284	284	81	81	81	81	81
7	EGI D-P	2,194	2,194	2,194	2,194	2,194	-	-	-	-	-
8	In-Franchise Supply	64	64	64	64	64	0	0	0	0	0
9	Third-Party Services	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
10	Total Supply	3,315	3,334	3,334	3,334	3,334	709	709	709	709	709
11	Excess(Shortfall)	(63)	(55)	(66)	(77)	(88)	(14)	(20)	(27)	(33)	(40)
12	*Shortfall % of Net Demand*	*1.9%*	*1.6%*	*1.9%*	*2.3%*	*2.6%*	*1.9%*	*2.8%*	*3.7%*	*4.5%*	*5.3%*

Union North rate zone design day position

Line No.	Particulars (TJ/d)	North West 2023/24 (a)	North West 2024/25 (b)	North West 2025/26 (c)	North West 2026/27 (d)	North West 2027/28 (e)	North East 2023/24 (f)	North East 2024/25 (g)	North East 2025/26 (h)	North East 2026/27 (i)	North East 2027/28 (j)
	Demand										
1	Union North(1)	138	140	141	141	142	460	453	456	457	461
	Supply Asset										
2	TCPL Long-Haul	81	81	81	81	81	8	8	8	8	8
3	TCPL Short-Haul	-	-	-	-	-	120	120	120	120	120
4	North Dawn T-Service	-	-	-	-	-	33	33	33	33	33
5	LNG	-	-	-	-	-	33	31	32	33	35
6	Redelivery from Storage										
7	*From Parkway*										
8	STS Withdrawals	31	31	31	31	31	88	88	88	88	88
9	STS Pooled Withdrawals	-	-	-	-	-	17	17	17	17	16
10	Short-haul Firm	-	-	-	-	-	119	119	119	119	119
11	Enhanced Market Balancing	-	-	-	-	-	25	25	25	25	25
12	*From Dawn*										
13	STS Withdrawals	18	18	18	18	19	-	-	-	-	-
14	Third-Party Services	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
15	Total Supply	131	131	131	131	132	443	441	442	443	444
16	Excess(Shortfall)	(7)	(9)	(9)	(10)	(10)	(17)	(12)	(14)	(15)	(16)
17	*Shortfall % of Demand*	*5.2%*	*6.5%*	*6.7%*	*6.8%*	*7.4%*	*3.7%*	*2.7%*	*3.1%*	*3.2%*	*3.6%*

Note:
(1) Includes Sales Service, Bundled DP, North Dawn T-Service.

Union South rate zone design day position

Line No.	Particulars (TJ/d)	2023/24 (a)	2024/25 (b)	2025/26 (c)	2026/27 (d)	2027/28 (e)
	Demand					
1	Union South[1]	3,396	3,460	3,515	3,652	3,674
	Supply Asset					
2	Great Lakes	21	21	21	21	21
3	NEXUS	106	106	106	106	106
4	Non-obligated (e.g. Power Plants)	421	421	421	421	421
5	Ontario Dawn	572	579	583	579	585
6	Ontario Parkway	227	229	227	314	312
7	Panhandle	60	60	60	60	60
8	Storage	1,859	1,914	1,967	2,021	2,040
9	TCPL Long-Haul	3	3	3	3	3
10	TCPL Niagara	21	21	21	21	21
11	Vector	106	106	106	106	106
12	Total Supply	3,396	3,460	3,515	3,652	3,674
13	Excess (Shortfall)	-	-	-	-	-

Note:
(1) Includes Sales Service, Bundled DP, T-Service.

Design day weather

Delivery Area	Weather Station	Design Day HDD (°C)	Design Day Temperature (°C)	Occurrence Date [1]	Coldest Temperature (°C)
(a)	(b)	(c)	(d)	(e)	(f)
CDA Niagara	St Catharines	38.8	-20.8	N/A	-20.6
CDA GTA	Toronto	41.4	-23.4	N/A	-26.0
EDA	Ottawa	48.2	-30.2	N/A	-31.6
MDA	International Falls	54.7	-36.7	1/30/2019	-36.7
WDA	Thunder Bay	51.6	-33.6	2/1/1996	-33.1
NDA	Sudbury	51.9	-33.9	1/3/1981	-33.2
EDA	Kingston	47.1	-29.1	1/3/1981	-29.2
NCDA	Muskoka	49.3	-31.3	2/13/2016	-33.6
SSMDA	Sault Ste Marie	48.2	-30.2	1/15/1994	-28.9
Union South	London	43.1	-25.1	2/15/2015	-24.8

(1) EGD rate zone used a probabilistic method to determine the design day temperature therefore there is no associated date.

Average day position

- Minimal average day growth projected in the EGD rate zone whereas the Union rate zones are expecting a decline.

Line No.	Demand by Rate Zone (TJ)	2023/24	2024/25	2025/26	2026/27	2027/28	Growth 2023 → 2028
		(a)	(b)	(c)	(d)	(e)	(f)
	EGD						
1	Annual Demand	311,119	312,239	312,722	313,330	314,010	2,891
2	Daily Demand	850	855	857	858	860	10
	Union						
3	Annual Demand	191,962	190,793	190,250	189,752	190,261	(1,701)
4	Daily Demand	524	523	521	520	521	(3)

Q&A

Portfolio and Transportation Contracting Changes

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Supply

Table 5

Sources of Supply

Line No.	Particulars (TJ)	2023/24	2024/25	2025/26	2026/27	2027/28
		(a)	(b)	(c)	(d)	(e)
	EGD					
1	Appalachia	43,087	42,970	42,970	42,970	43,087
2	Chicago	33,021	32,931	32,931	32,931	33,021
3	Niagara Region	73,471	73,270	73,270	73,270	73,471
4	Dawn	81,303	82,986	83,521	83,793	83,637
5	Peaking/Seasonal	77	76	93	111	128
6	WCSB	97,062	96,799	96,813	97,115	97,099
7	Total EGD	328,021	329,031	329,597	330,189	330,444
	Union North West					
7	WCSB	16,301	15,651	13,439	16,730	14,378
	Union North East					
8	Appalachia	19,308	19,255	19,255	19,255	19,308
9	Dawn	6,309	7,505	9,920	6,550	9,045
10	WCSB	2,708	2,700	2,700	2,700	2,708
11	Total North East	28,325	29,460	31,875	28,506	31,061
	Union South					
12	Appalachia	38,615	38,510	38,510	38,510	38,615
13	Chicago	38,615	38,509	38,509	38,509	38,615
14	Niagara Region	7,723	7,702	7,702	7,702	7,723
15	Dawn(1)	39,044	38,437	38,401	38,027	37,664
16	U.S. Mid-Continent	22,011	21,950	21,950	21,950	22,011
17	WCSB	8,821	8,797	8,797	8,797	8,821
18	Total South	154,828	153,905	153,870	153,495	153,448
19	Total Supply Forecast	527,476	528,048	528,781	528,920	529,330

Note:

(1) Includes Ontario Production.

Storage

Table 6
Storage Requirement Forecast

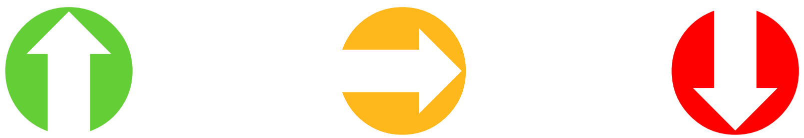
Line No.	Particulars (PJ)	2023/24	2024/25	2025/26	2026/27	2027/28
		(a)	(b)	(c)	(d)	(e)
	EGD					
	In-franchise Storage Requirement					
1	In-franchise Customer Requirement	125.7	125.7	125.7	125.7	125.7
	Cost-Based Storage					
2	Tecumseh	99.4	99.4	99.4	99.4	99.4
3	Crowland	0.3	0.3	0.3	0.3	0.3
4	Market Based Storage	26.0	26.0	26.0	26.0	26.0
5	Space Allocated for In-franchise Use	125.7	125.7	125.7	125.7	125.7
	Union					
	In-franchise Storage Requirement					
6	System Integrity	9.5	9.5	9.5	9.5	9.5
7	In-franchise Customer Requirement	88.6	87.8	88.1	89.6	89.9
8		98.1	97.3	97.6	99.1	99.5
	Cost-Based Storage					
9	Dawn	100.0	100.0	100.0	100.0	100.0
10	Excess Utility Space Available	1.9	2.7	2.4	0.9	0.5

Evaluation process

- Evaluation matrix used to demonstrate the impact of a particular option against existing portfolio

Option	Reliability	Flexibility	Diversity	Costs ($ million/yr)	Average Cost/Customer Impact	Available Capacity

- Colour-coded symbols indicate option’s impact compared to existing portfolio



Design day analysis outcomes

EGD rate zone

- Design day shortfalls projected in Enbridge CDA and Enbridge EDA.
- Enbridge Gas managed shortfalls with third-party services.

Union North rate zones

- Enbridge Gas managed forecast growth with STS withdrawals, Hagar LNG, CPMI/CTHI transportation, third-party services.

Union South rate zone

- No design day shortfalls projected.
- No action required.

Third-party peaking services

EGD delivery areas:

- Enbridge CDA – 63,000 GJ/d
- Enbridge EDA – 14,000 GJ/d

Union delivery areas:

- Union EDA – 17,000 GJ/d
- Centrat MDA – 200 GJ/d
- Union WDA – 7,000 GJ/d

Pipeline purchases and renewals

- Bluewater River Crossing
  - Union South rate zone
  - Capacity: 127,000 GJ/d
  - Term: 1-year effective Nov. 1, 2024
  - Path: connects the Bluewater Gas system in Michigan to the Enbridge Gas system at the international border
  - ~$1.0M incremental annual cost
  - Enables an important back-up supply option for the Sarnia market
  - Increases competition for storage services in the Great Lakes region
  - Transportation capacity on this path provides access to Michigan pipeline and storage systems, increasing competition and optionality

Pipeline purchases and renewals

- St. Clair River Crossing
  - Union South rate zone
  - Capacity: 214,000 GJ/d
  - Term: 1-year effective Nov. 1, 2024
  - Path: connects MichCon/DTE system in Michigan to the Enbridge Gas system at the international border
  - ~$300K incremental annual cost
  - Facilitates access to NEXUS and Michcon/DTE system into Ontario

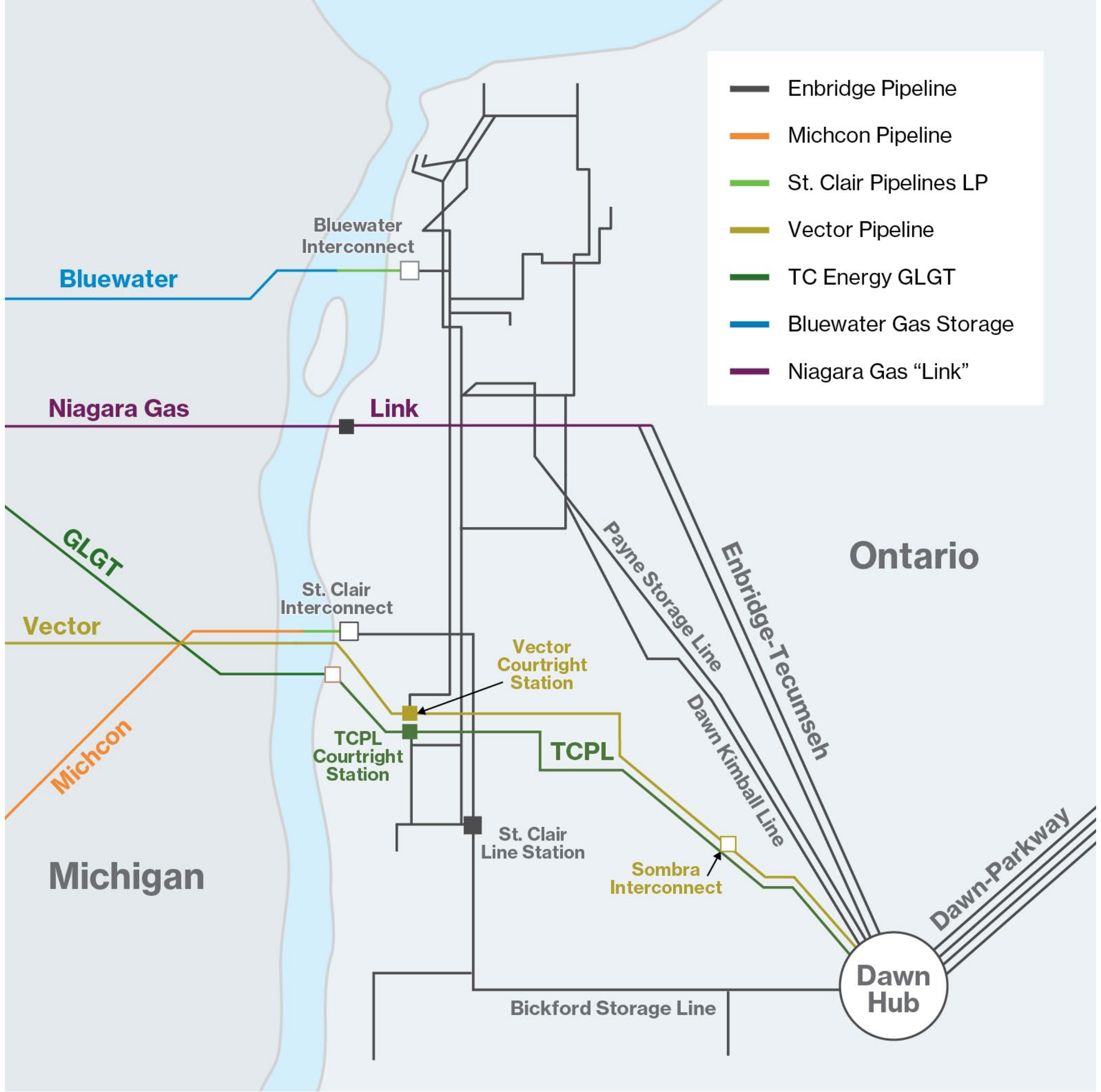
Pipeline purchases and renewals

- CTHI/CPMI pipeline incremental capacity
  - Union North West rate zone
  - Capacity: increased by 206 GJ/d
  - Term: 1-Year effective Nov. 1, 2023
  - Path: Centrat MDA to Union MDA
  - ~$60K incremental annual cost
  - Union MDA can only be served via the CTHI/CPMI system

Pipeline purchases and renewals

- TCPL capacity purchase
  - EGD rate zone
  - Enbridge CDA delivery area
  - Capacity: 18,876 GJ/d
  - Term: 5-years effective Nov. 1, 2024
  - Path: Parkway to Enbridge CDA
  - Transportation to the Enbridge CDA is only available through TCPL and is scarce
  - Does not require Enbridge Gas to support a build with an associated long-term contract
  - Ensures secure and reliable gas supply to the Enbridge CDA

Sarnia market



Sarnia market on a design day

	Supply (TJ/d)	Contract expiry	2023 Renewal decision
2023/24 Design Day Forecast	624.2		
Supply			
Enbridge Gas pipelines	94.2		
GLGT	21.1	Oct. 31, 2024	Renewed to 2029
DTE/St. Clair	158.3	Oct. 31, 2033	
Vector	84.4	Oct. 31, 2025	
Vector	21.1	Oct. 31, 2026	
Vector	21.1	Oct. 31, 2026	
Vector	68.6	Oct. 31, 2024	Renewed to 2027
Vector	116.0	Oct. 31, 2033	
Total supply	584.4		
Shortfall (prior to backhaul purchase)	39.4		
Vector Canada Backhaul	84.4		New capacity until 2027
Surplus	44.0		

Sarnia market

- Serving Sarnia with upstream supply offsets facilities builds.
- Enbridge Gas relies on a mix of contracted and third-party natural gas flows on multiple upstream pipelines to serve Sarnia market design day demands.
- Market dynamics have led to third-party flows becoming increasingly unreliable.

Pipeline purchases and renewals

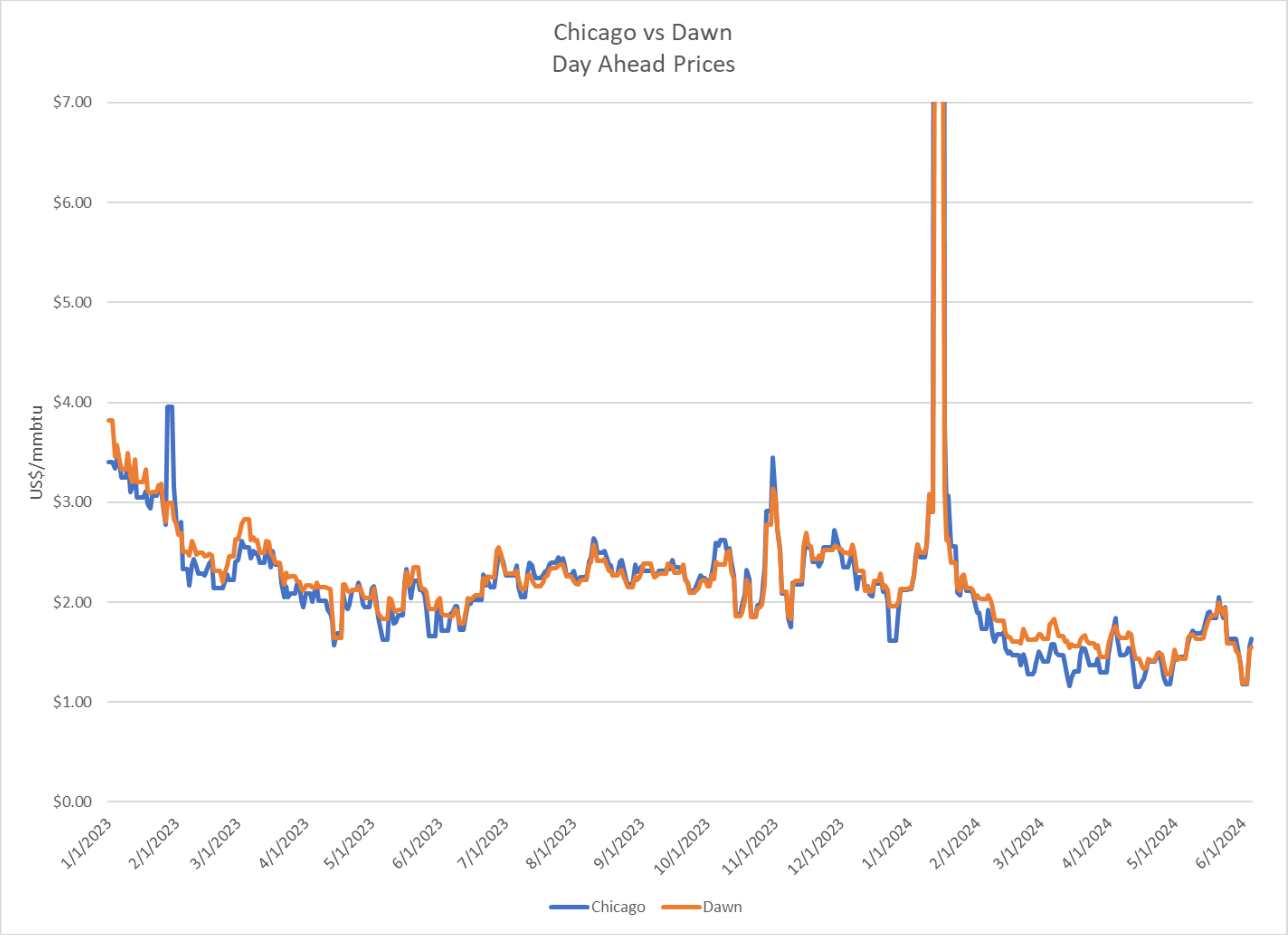
- Vector Canada pipeline purchase
  - Union South rate zone
  - Capacity: 84,404 GJ/d
  - Term: 3-year effective Nov. 1, 2024
  - Path: Dawn-Vector to St. Clair
  - Existing capacity
  - Competitively-priced toll ($0.0234/GJ/d): ~$700K incremental annual cost

Pipeline purchases and renewals

- Vector pipeline renewal
  - EGD rate zone
  - Capacity: 65,000 Dth/d
  - Term: 3-year effective Nov. 1, 2024
  - Path: Chicago to Dawn
  - Competitively priced, reliable and flexible option that maintains diversity
    - Negotiated price reduction from $0.18 US/Dth/d to $0.16 US/Dth/d
    - Negotiated renewal rights at lower toll
  - Ability to supply the Sarnia Industrial Line (SIL)

Chicago natural gas price analysis
- ICF Report: Oct 2023

- Beginning in 2021, natural gas prices between Chicago and Dawn shifted from a Chicago discount to a Chicago premium compared to Dawn <u>in the forward market</u>, even though Chicago day-ahead prices have on average continued to trade at a discount to Dawn.
- ICF's Q3 2023 Base Case projection, used in the Landed Cost Analysis for the Vector contract renewal, forecasts Chicago at a discount to Dawn over the term of the renewal.
- Following an in-depth analysis, ICF's view is that the increase in Chicago's forward prices reflects a market risk premium associated with extreme weather and potential price volatility specific to that location, and not a shift in long-term market fundamentals.
- ICF recommends that Enbridge Gas continue to base their pipeline re-contracting decisions on long-term market fundamentals, and supply diversity and reliability benefits, rather near-term forward market trends.



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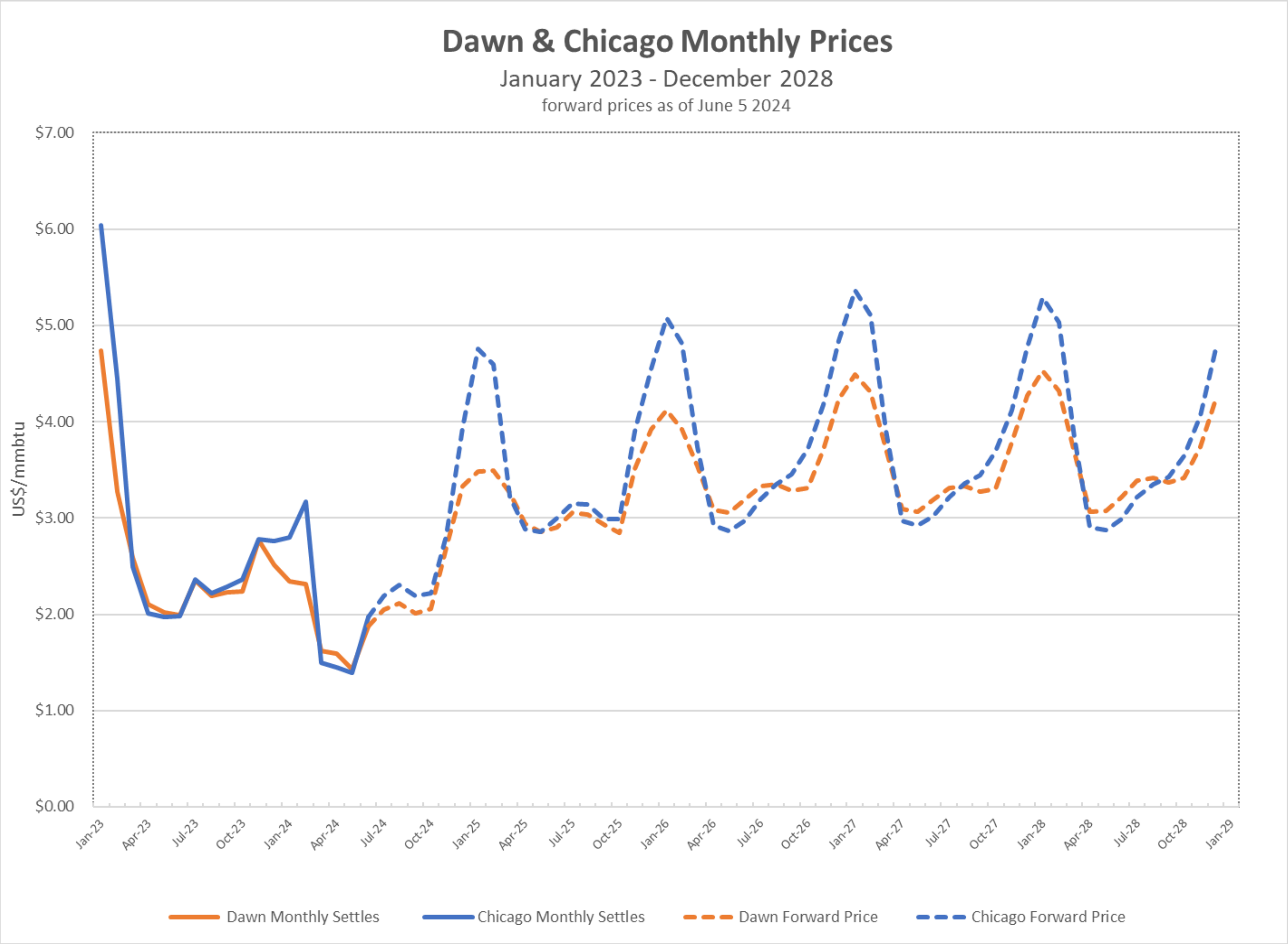
Consistent with ICF Report

- Since 2023, day-ahead prices for Dawn have continued to trade at a premium to Chicago more often than Chicago at a premium to Dawn.
- There are short-term winter price spikes that are more extreme at Chicago than Dawn.



Consistent with ICF Report

- The forward curve shows a significant risk premium in Chicago prices over Dawn prices, especially in winter months.
- Premium is lower than in prior years.

Pipeline purchases and renewals

- GLGT pipeline renewal
  - Union South rate zone
  - Capacity: 20,000 Dth/d
  - Term: 5-year effective Nov. 1, 2024
  - Path: Empress to Emerson (TCPL), Emerson to Dawn (Great Lakes)
  - Competitively priced, reliable and flexible option that maintains diversity
  - Ability to supply the Sarnia Industrial Line (SIL)

Pipeline purchases and renewals

- NEXUS pipeline Clarington capacity
  - Union North East and Union South rate zones
  - Clarington Capacity: 65,000 Dth/d
    - Extended: 40,000 Dth/d to Oct. 31, 2026 (2 years)
    - Shifted: 25,000 Dth/d from Kensington to Clarington until Oct. 31, 2025 (2 years)
  - Path: Clarington to Kensington
  - Competitively-priced toll of $0.24 US/Dth/d
  - Expands Enbridge Gas' access to the liquid Clarington supply point
  - Incremental cost of this transportation capacity is more than offset by lower commodity prices at Clarington

NEXUS pipeline

	November 1, 2023 – October 31, 2025	November 1, 2025 – October 31, 2026	November 1, 2026 – October 31, 2033
Clarington	65,000 Dth/day	40,000 Dth/day	0 Dth/d
Kensington	85,000 Dth/day	110,000 Dth/day	150,000 Dth/day
Total:	**150,000 Dth/day**	**150,000 Dth/day**	**150,000 Dth/day**

Pipeline purchases and renewals

- NGTL pipeline renewal
  - EGD rate zone
  - Capacity: 50,000 GJ/d
  - Term: 3-years effective Nov. 1, 2024
  - Path: AECO to Empress
  - Competitively-priced toll
    - 5 percent reduction to the regulated toll for 3-year contract
    - Liquids extraction savings
  - Diversifies gas purchases between Empress and AECO

Supply diversity

Forecasted Premium/(Discount) ($000s)	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	Total
NEXUS	$ (1,706.4)	$ (4,365.4)	$ (2,642.6)				$ (8,714.4)
GLGT Renewal		$ 770.2	$ 616.1	$ (231.1)	$ (924.2)	$ (693.2)	$ (462.1)
NGTL Renewal		$ 103.1	$ 50.4	$ (111.3)			$ 42.2
Vector Renewal		$ 2,753.4	$ 2,252.8	$ 2,503.1			$ 7,509.3

Q&A

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RNG, RSG & Hydrogen

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Lower-carbon energy procurement

- Enbridge Gas has procured renewable natural gas (RNG), responsibly sourced gas (RSG), and hydrogen as part of the lower-carbon energy mix.
- Through the procurement of RNG and hydrogen, Enbridge Gas has abated 313 tCO_2e, as of the end of the 2022/23 year.
- Enbridge Gas did not receive or create Clean Fuel Regulations (CFR) credits for RNG or hydrogen procurement.
  - The decision to purchase with or without CFR credits will be evaluated on a case-by-case basis, with comparison and consideration of other bids received during the contracting process.

Voluntary Renewable Natural Gas program (VRNG)

- Voluntary program with a focus on residential customers across all rate zones
- Fixed monthly charge of $2 used to purchase RNG
- 3,300 GJs purchased
- 3,559 participants as of Oct. 31, 2023
- Proposal in Rebasing Phase 2 to replace the VRNG program with a Low Carbon Voluntary Program (LCVP) targeted at large volume sales service customers

	No. of Customers	
Rate Zone	Residential	Commercial/ Industrial
EGD (Rate 1)	2,092	-
EGD (Rate 6)	-	96
Union North (Rate 01)	281	16
Union South (Rate M1)	1,047	27
Subtotal	**3,420**	**139**
Grand Total	**3,559**	

Responsibly sourced gas (RSG)

- RSG is an emerging trend in the natural gas industry.
- RSG has undergone independent third-party verification that molecules are produced under best practices aimed at minimizing environmental and community impacts.
- A comprehensive scan of the RSG market has not been completed, however, Enbridge Gas continues to evaluate RSG opportunities as they arise.
- Enbridge Gas has procured RSG under standard procurement practices.
  - Enbridge Gas has not paid a premium for RSG.

RSG certifications

- RSG certifications measure a natural gas producer’s conformance to several environmental, social and governance standards.
- Enbridge Gas has procured RSG certified under the Equitable Origin and MiQ programs, with the majority certified under both Equitable Origin and MiQ programs.

Table 1: Topic Areas Covered by Certification Programs

Category	Equitable Origin	MiQ	Project Canary
Methane Emissions	✔	✔	✔
Methane Mitigation Practices	✔	✔	✔
Methane Monitoring	✔	✔	✔
Total GHG Emissions	✔	✔	✔
Air Quality	✔		✔
Water Management	✔		✔
Chemical Management	✔		✔
Land Use	✔		✔
Community Impacts	✔		✔
Safety	✔		✔
Corporate Governance	✔		
Indigenous Peoples’ Rights	✔		

Certification Types and RSG Procurement (%)

	Certification		
	Equitable Origin	Equitable Origin / MiQ	MiQ
2020-2021	0.00%	0.00%	0.00%
2021-2022	1.74%	98.26%	0.00%
2022-2023	0.00%	69.96%	30.04%

Hydrogen activities

- Low Carbon Energy Project (LCEP) Phase 1
  - Since 2021, Enbridge Gas has procured approximately 18,250 kg of hydrogen annually for hydrogen blending.
- Average percent of hydrogen blending on a 12-month annualized basis is 0.9 percent and the maximum percent is 2.0 percent.
- No plans to convert existing storage or use incremental storage for hydrogen.

Q&A

Historical Review and Performance Metrics

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Three-year historical review

Table 30
Actual vs. Planned Sources of Supply

Line No.	Particulars (TJ)	2020/21 Actual (a)	2020/21 Plan (b)	2020/21 Variance (c)	2021/22 Actual (d)	2021/22 Plan (e)	2021/22 Variance (f)	2022/23 Actual (g)	2022/23 Plan (h)	2022/23 Variance (i)
	EGD									
1	Appalachia	40,393	43,117	(2,725)	41,452	43,151	(1,699)	40,018	43,140	(3,122)
2	Chicago	25,892	25,194	698	25,742	32,980	(7,238)	21,943	32,963	(11,020)
3	Niagara Region	72,989	73,355	(366)	73,070	73,341	(271)	73,095	73,194	(99)
4	Dawn	86,802	101,670	(14,868)	110,825	86,748	24,077	85,489	91,943	(6,454)
5	Peaking/Seasonal	-	82	(82)	-	23	(23)	-	41	(41)
6	WCSB	89,780	90,562	(781)	94,680	92,580	2,100	94,447	95,653	(1,206)
7	Total EGD	315,856	333,980	(18,124)	345,769	328,823	16,946	314,992	336,934	(21,942)
	Union North West									
8	WCSB	19,294	16,314	2,980	19,811	11,851	7,960	21,533	11,467	10,066
9	Ontario/Dawn	137		137			-	-		-
10	Total North West	19,431	16,314	3,117	19,811	11,851	7,960	21,533	11,467	10,066
	Union North East									
11	Appalachia	18,040	19,255	(1,214)	18,612	19,254	(642)	19,015	19,255	(240)
12	Dawn	12,010	11,867	143	13,374	11,432	1,942	11,577	12,068	(491)
13	WCSB	1,483	1,364	118	1,590	1,493	97	2,940	2,700	240
14	Total North East	31,533	32,486	(953)	33,577	32,180	1,397	33,532	34,024	(492)
	Union South									
15	Appalachia	36,630	38,510	(1,879)	33,008	38,510	(5,501)	33,644	38,510	(4,866)
16	Chicago	26,194	30,807	(4,613)	32,747	38,509	(5,763)	30,926	38,509	(7,583)
17	Niagara Region	7,316	7,702	(386)	8,873	7,702	1,171	7,702	7,702	0
18	Dawn	31,396	43,992	(12,596)	36,195	34,799	1,396	28,306	30,991	(2,685)
19	U.S. Mid-Continent	21,938	21,950	(12)	21,246	21,950	(704)	17,255	21,950	(4,695)
20	WCSB	8,791	8,797	(5)	8,765	8,797	(32)	8,806	8,797	9
21	Total South	132,266	151,758	(19,492)	140,834	150,267	(9,433)	126,640	146,459	(19,820)
22	Total Supply	499,086	534,538	(35,452)	539,990	523,121	16,870	496,697	528,884	(32,188)

Note:
(1) Ontario Production is included as part of the Dawn number in the Union South total.

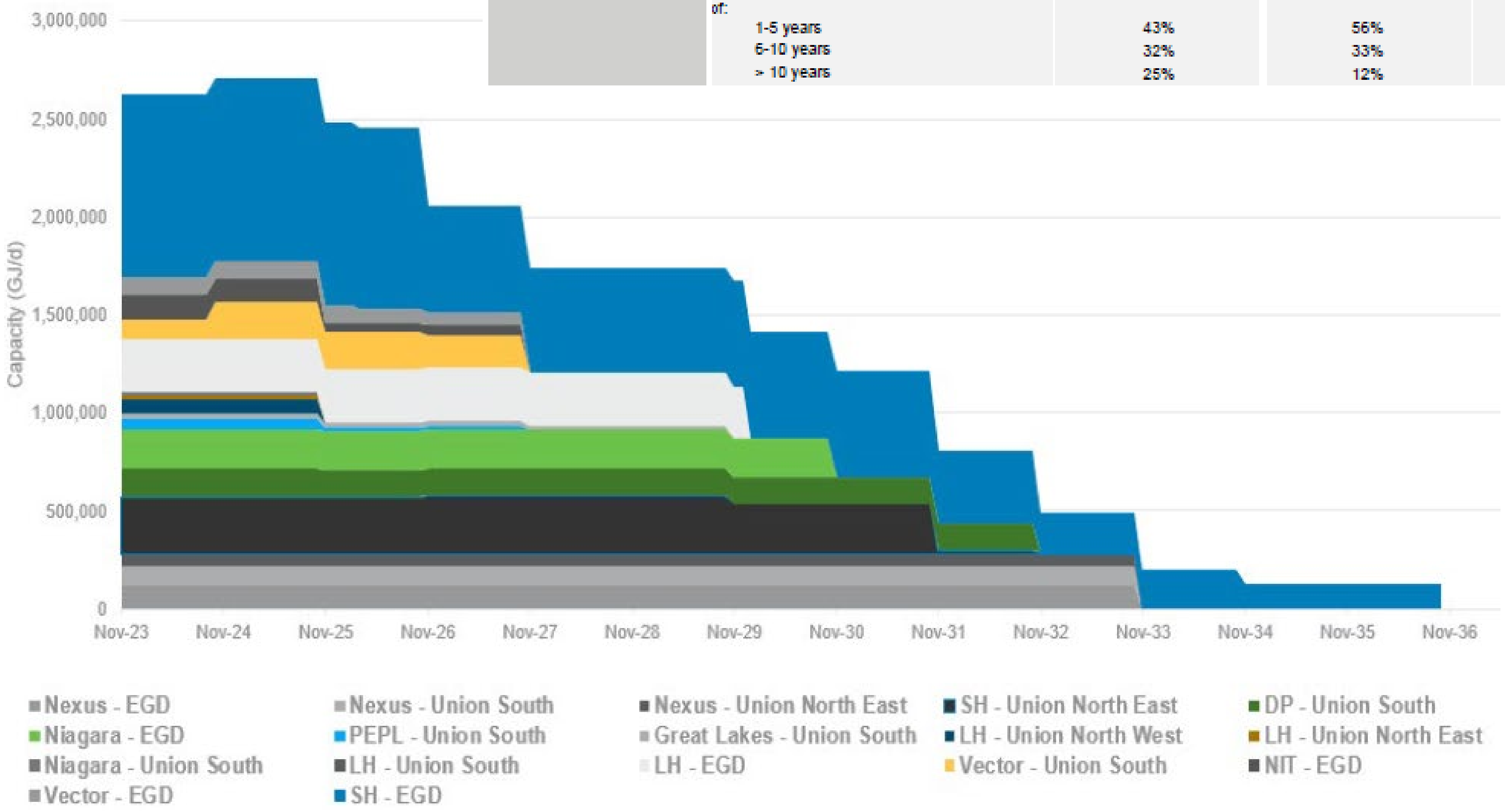
Table 31
Actual vs. Planned Unutilized Capacity

Line No.	Particulars (PJ)	2020/21 Actual	2020/21 Plan	2020/21 Variance	2021/22 Actual	2021/22 Plan	2021/22 Variance	2022/23 Actual[1]	2022/23 Plan	2022/23 Variance
1	EGD	-	-	-		-	-	-	-	-
2	North West	6.0	9.7	(3.8)	6.0	13.6	(7.7)	4.0	13.9	(6.4)
3	North East	3.0	5.9	(3.0)	1.9	1.8	0.1	4.7	2.4	(3.6)
4	South	19.6	-	19.6	9.5	-	9.5	18.6	-	18.6
5	Total unutilized capacity	28.5	15.6	13.0	17.4	15.5	1.9	27.3	16.3	8.5

Note:
(1) Actual 2022/2023 unutilized capacity volume allocations are preliminary. Final allocations will be filed in the 2023 Non-Commodities Deferral proceeding.

Transportation portfolio term

Performance Category	Measure	2020/21 Results	2021/22 Results	2022/23 Results	3-Year Average[1]
Diversity	Percentage of contracts with remaining terms of:				
	1-5 years	43%	56%	43%	47%
	6-10 years	32%	33%	52%	39%
	> 10 years	25%	12%	5%	14%

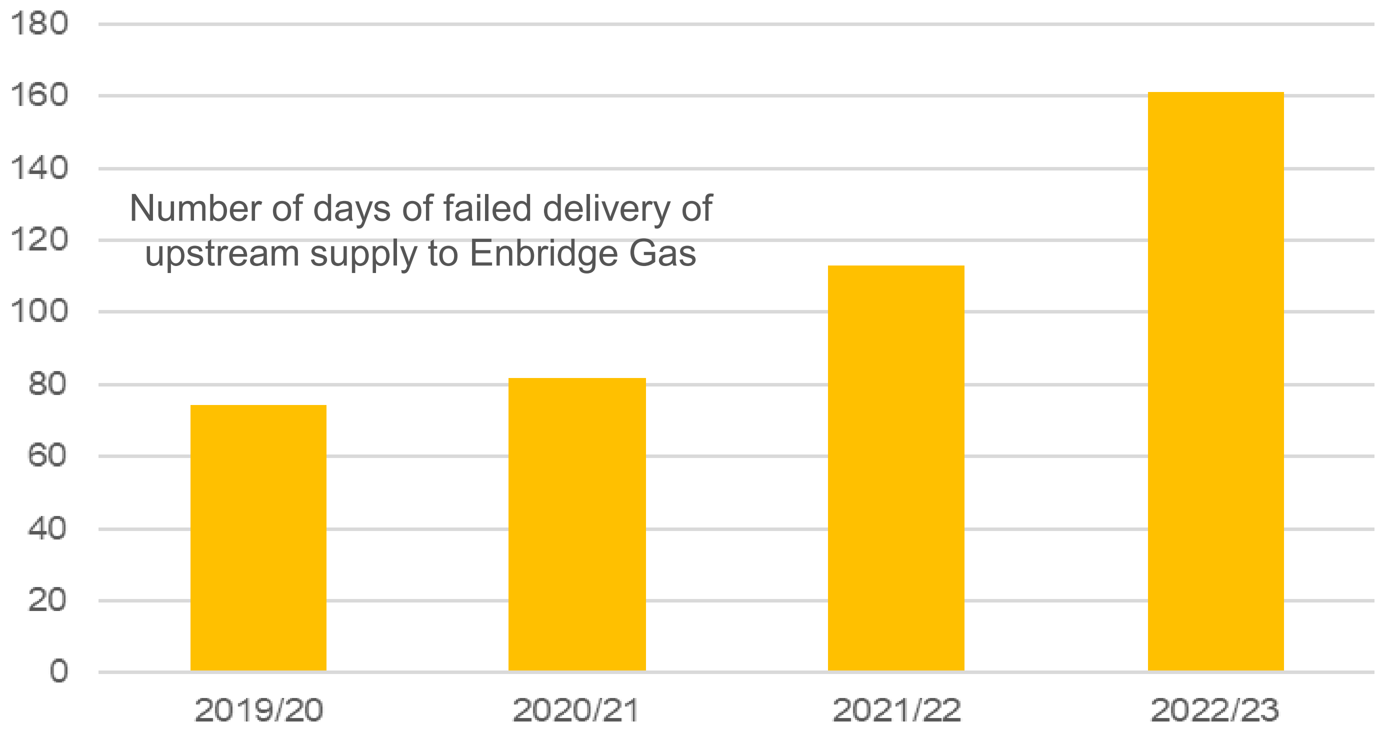


Curtailments

Performance Category	Intent of Measure	Measure	2020/21 Results	2021/22 Results	2022/23 Results	3-Year Average[1]
Reliability	Reports EGI's experience with pipeline and supply disruptions demonstrating the reliability of the portfolio	Number of days of force majeure on upstream pipelines that reduced capacity	0	14	15	10
		Number of days of force majeure on upstream pipelines impacting customers' security of supply	0	0	0	0
		Number of days of failed delivery of supply (including force majeure)	82	113	161	119
		Number of days of failed delivery of supply impacting customers security of supply	0	0	0	0
		Number of days of force majeure on storage assets	0	0	0	0

Upstream supply and transportation curtailments

North American pipeline capacity is more constrained.



Public policy

Performance Category	Intent of Measure	Measure	2020/21 Results	2021/22 Results	2022/23 Results	3-Year Average[1]
Supporting Policy	Reports public policy considered in EGI's Plan	Community expansion addressed in the plan	C	C	C	n/a
		DSM savings addressed in the plan	C	C	C	n/a
		Federal Carbon Pricing Program addressed in the Plan	C	C	C	n/a
		Percentage of RNG in the portfolio	0%	0%	0%	0%
		Emissions abated through procurement of RNG and hydrogen (tCO_2e)[4]	0	117	196	104
		Percentage of RSG in the portfolio	0	0.4%	5.8%	2.1%
		OEB-approved supply-side IRP alternatives implemented in the Plan	0	0	0	0

	2020/21	2021/22	2022/23
Total Supply (TJ)	449,086	539,990	496,467
RNG (GJ)	0	1,000	2,300
% in Portfolio	0%	0.00019%	0.00046%
RNG Abated Emissions	0	49.15 tCO_2e	113.61 tCO_2e
Hydrogen (GJ)	11	1,382	1,661
% in Portfolio	0.000002%	0.00026%	0.00033%
Hydrogen Abated Emissions	0.54 tCO2e	68.0 tCO_2e	82.05 tCO_2e

Q&A

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Appendix

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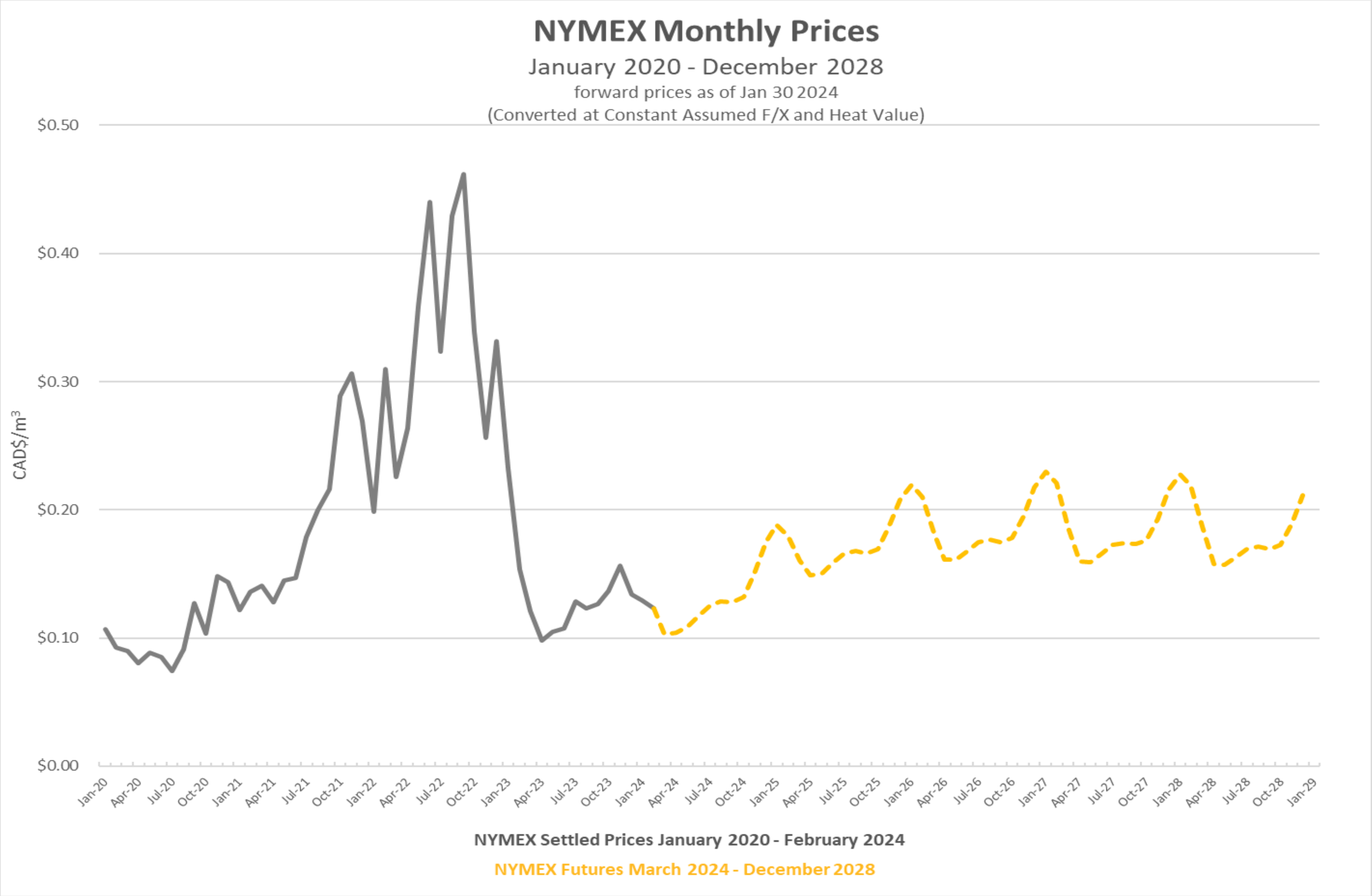

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Assumptions:
FX = 1.36 CAD/USD

Heat Value = 0.0366 MMBtu/m3

Bluewater Gas storage system map

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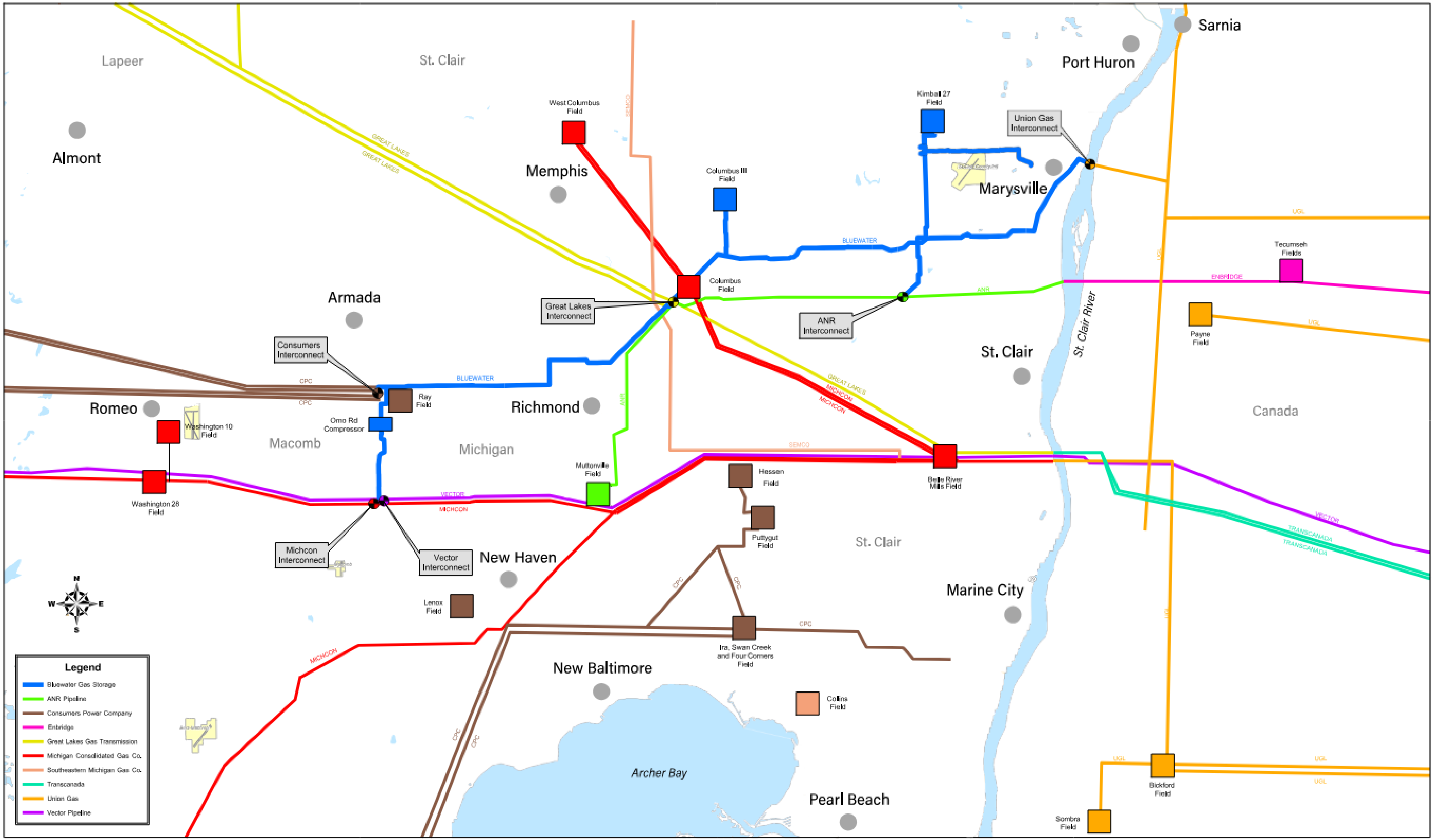

TAB 3

CURRICULUM VITAE OF
AMY MIKHAILA

Experience:	Enbridge Gas Inc.
	Director, Gas Supply 2024
	Manager, Policy & Sales Support 2023
	Manager, Rate Design 2019
	Union Gas Limited
	Manager, Rates & Pricing 2015
	Manager, Plant Accounting 2012
	Team Lead, General Accounting 2009
	Senior Coordinator, Operations Budgets 2006
Education:	Honours Business Administration University of Western Ontario (2001)
Memberships:	Chartered Professional Accountants of Canada Chartered Professional Accountants of Ontario, Professional Chartered Accountant
	Illinois Department of Financial and Professional Regulation, Registered Certified Public Accountant
Appearances:	(Ontario Energy Board)
	EB-2022-0200 EB-2017-0306/0307 EB-2016-0296 EB-2016-0186

CURRICULUM VITAE OF
DAVE JANISSE

Experience: Enbridge Gas Inc.

Manager, Gas Supply Acquisition
2022

Technical Manager, Leave to Construct Applications
2021

Supervisor, Gas Supply
2020

Specialist, S&T Sales
2019

Union Gas Limited

Senior Advisor, Strategic Sales
2018

Senior Buyer, Carbon Markets
2017

Senior Buyer, Gas Supply
2015

Buyer, Gas Supply
2014

Financial Planning & Forecast Analyst
2012

Financial Analyst, CA Stream
2010

Education: Honours Bachelor of Commerce
University of Windsor (2010)

Memberships: Chartered Professional Accountants of Canada
Chartered Professional Accountants of Ontario,
Professional Chartered Accountant

Appearances: (Ontario Energy Board)

EB-2017-0255

CURRICULUM VITAE OF
STEVE DANTZER

Experience:	Enbridge Gas Inc.
	Supervisor, Gas Supply Planning 2020
	Supervisor, Upstream Regulation 2019
	Union Gas Limited
	Specialist, Carbon 2018
	Program Manager, Cap and Trade 2016
	Project Manager, Upstream Regulation 2013
	Team Lead, General Accounting 2012
	Team Lead, Affiliate Reporting 2010
	Senior Analyst, Financial Reporting 2008
Education:	Honours Business Commerce University of Windsor (2004)
Memberships:	Chartered Professional Accountants of Canada Chartered Professional Accountants of Ontario, Professional Chartered Accountant
Appearances:	(Ontario Energy Board)
	EB-2017-0255