

ENBRIDGE GAS INC.

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario (FRPO)

Interrogatory

Reference:

Ex. 4, Tab 2, Schedule 1, pg. 18-20

Preamble:

EGL evidence states: *The total storage space of 217.7 PJ was determined using the aggregate excess calculation of 202.7 PJ and t-service storage requirement of 15 PJ.*

Question(s):

Please specify the existing rate classes that are under the “t-service storage.”

- a) What distinguishes the characteristics of the t-service storage from the remaining storage?
- b) Please provide the existing allocation of space and deliverability to these rate classes and a description of the methodology.
 - i. If this determination of the existing allocation and associated deliverability is available in evidence, please provide the specific reference.
- c) Please provide the allocation to these rate classes and a description of the methodology for the 2024 proposed allocation.
- d) Please provide the existing allocation of the 202.7 PJ and associated deliverability to each of the existing rate classes.

Response:

T-Service storage requirement refers to storage space contracted by Union South semi-unbundled customers in Rate T1, Rate T2 and Rate T3 and the Union North unbundled (T-Service) storage service in Rate 20 and Rate 100.

- a) The distinguishing factor is that the storage requirements are contracted for by the customer based on storage allocation methodologies and managed by the customer.

b-c) Please see Table 1 for the 2013 and 2024 allocation of storage deliverability and storage space for T-Service customers.

Table 1
T-Service Storage Allocation

Line No.	Allocation Factors (TJ)	Union North		Union South		
		Rate 20	Rate 100	Rate T1	Rate T2	Rate T3
		(a)	(b)	(c)	(d)	(e)
	<u>2013 Cost Allocation Study</u>					
1	Storage Deliverability	8	1	55	236	57
2	Storage Space	769	121	1,866	8,837	3,051
	<u>2024 Cost Allocation Study</u>					
3	Storage Deliverability	12	-	34	211	54
4	Storage Space	983	-	1,485	9,403	3,206

In Union's 2013 Cost Allocation Study, storage deliverability costs were allocated to T-Service customers based on aggregate excess and storage space costs were allocated based on the contracted storage space.

A description of the proposed methodology for the allocation of storage deliverability and storage space is provided at Exhibit 7, Tab 1, Schedule 2, pages 17-18.

A comparison of the existing and proposed cost allocation methodologies of storage space and storage deliverability for Union North and Union South are provided at Exhibit 7, Tab 1, Schedule 3, page 2.

The current storage allocation methodologies that customers are able to contract for, including the evidence reference, are listed below for the Union North and Union South rate zones. There are currently no unbundled customers in the EGD rate zone with an allocation of cost-based storage.

- For customers in the Union North rate zone, please see Exhibit 8, Tab 4, Schedule 5, page 7;
- For customers in the Union South rate zone with an obligated DCQ for all of their deliveries, please see Exhibit 8, Tab 4, Schedule 4, pages 6-7; and
- For customers in the Union South rate zone with a non-obligated DCQ at Dawn, please see Exhibit 8, Tab 4, Schedule 5, pages 9-11.

d) Please see Table 2.

Table 2
Storage Allocation to Bundled Rate Classes

Line No.	Particulars (TJ)	2024 Allocation Factor	
		Storage Deliverability	Storage Space
		(a)	(b)
	<u>EGD Rate Zone</u>		
1	Rate 1	1,527	65,278
2	Rate 6	1,327	52,816
3	Rate 100	4	209
4	Rate 110	97	4,459
5	Rate 115	4	574
6	Rate 125	-	-
7	Rate 135	-	-
8	Rate 145	-	109
9	Rate 170	-	492
10	Rate 200	29	1,893
11	Rate 300	-	-
	<u>Union North Rate Zone</u>		
12	Rate 01	274	12,978
13	Rate 10	77	3,224
14	Rate 20	11	441
15	Rate 25	-	-
16	Rate 100	-	-
	<u>Union South Rate Zone</u>		
17	Rate M1	866	41,073
18	Rate M2	309	12,362
19	Rate M4 (F)	97	2,541
20	Rate M4 (I)	-	5
21	Rate M5 (F)	1	10
22	Rate M5 (I)	-	-
23	Rate M7 (F)	161	3,492
24	Rate M7 (I)	-	363
25	Rate M9	10	354
26	Total	4,792	202,673

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Question(s):

How much total space and market-based storage did EGL hold for the winter of 2022/23?

- a) Please confirm or clarify that this amount of market-based storage would be included in the total space.

Response:

Table 1 includes a summary of Enbridge Gas's storage portfolio for Winter 2022/2023.

<u>Table 1</u> <u>Enbridge Gas Storage Portfolio (PJ)</u>	
	Winter 2022-2023
Dawn	96.5
Tecumseh	99.4
Crowland	0.3
Market-Based Storage	26.1
Total In-Franchise Storage Requirements	222.3

This information can also be found in Enbridge Gas's 2023 Gas Supply Plan Annual Update, Table 6¹.

¹ EB-2023-0072.

a) Confirmed, please see Table 1.

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Preamble:

Footnote 12 on the bottom of page 19 states: *As noted above, effective January 1, 2024, Enbridge Gas will utilize cost-based storage injection and withdrawal targets rather than procuring incremental storage space for operational contingency purposes.*

Question(s):

Please provide the monthly storage targets in tabular form for the following scenarios:

- a) Please provide the Union Rate Zone monthly storage targets throughout the year for the years 2019-2022.
- b) Please provide the proposed Union Rate Zone monthly storage targets for 2024-2025.
- c) Please provide the Enbridge Rate Zone monthly storage targets throughout the year for the years 2019-2022.
- d) Please provide the proposed Enbridge Rate Zone monthly storage targets for 2024-2025.

Response:

- a) Union rate zone planned storage balances are applicable to end of month balances for February, March, and October. Table 1 provides a summary of Union rate zone planned storage balances for the years 2019 to 2022.

Table 1
Union Rate Zones Storage Targets (PJ)

	Feb (a)	Mar (b)	Oct (c)
2019-2020	20.4	6.0	79.1
2020-2021	20.7	6.0	79.6
2021-2022	18.6	6.0	79.1

For the end of October planned storage balance, the total 100 PJ of cost-based storage is reduced by the storage requirements for T-Service customers and excess utility space.

- b) As a result of harmonization to a single rate zone, there is no storage target applicable to the EGD rate zone or Union rate zones effective January 1, 2024.

Table 2 provides applicable end of month 2024 storage targets for Enbridge Gas based on the proposal for one rate zone:

Table 2
Enbridge Gas Storage Targets (PJ)

	Feb (a)	Mar (b)	Apr (c)	Oct (d)
2024-2025	70.4	25.0	10.8	178.8

For the end of October planned storage balance, the total 199.4 PJ of cost-based storage is reduced by the storage requirements for T-Service customers and contingency space.

- c) EGD rate zone storage targets are applicable to end of month balances for February, March and October. Table 3 provides a summary of EGD rate zone storage targets for the years 2019 to 2022:

Table 3
EGD Rate Zones Storage Targets (PJ)

	Feb (a)	Mar (b)	Oct (c)
2019-2020	43.5	12.8	99.4
2020-2021	43.5	12.8	99.4
2021-2022	43.5	12.8	99.4

- d) Please see response to part b).

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Reference:

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Preamble:

Footnote 12 on the bottom of page 19 states: *As noted above, effective January 1, 2024, Enbridge Gas will utilize cost-based storage injection and withdrawal targets rather than procuring incremental storage space for operational contingency purposes.*

Question(s):

Please reconcile the above referenced statement with the evidence on Operational Contingency in Ex. 4, Tab 2, Schedule 4.

Response:

The operational contingency evidence¹ includes the following:

15.6 PJ of operational contingency will be required to support the reliability and resilience of the Enbridge Gas storage, transmission, and distribution systems. Operational contingency requirements will be managed through injection and withdrawal targets rather than procuring additional storage space. This will result in a 9.5 PJ (current Union rate zone operational contingency) reduction in the in-franchise storage space requirements.

This is consistent with the referenced statement included in the preamble. The operational contingency will be managed through the utilization of cost based storage and the associated injection and withdrawal targets.

¹ Exhibit 4, Tab 2, Schedule 4, page 1, paragraph 2.

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Reference:

Ex. 4, Tab 2, Schedule 1, pg. 21 & Attachment 1, pg. 2, line 25

Preamble:

EGL evidence states: *Storage (injection)/withdrawal costs are comprised of the cost associated with the net injections to/withdrawals from storage to balance the difference between annual gas supply and annual demand.*

Question(s):

Please provide a comprehensive description and a numeric example of how storage injection and storage withdrawal costs are determined.

a) For clarity, please provide an example using M1 in the Union Rate Zone.

Response:

The storage (injection)/withdrawal cost provided at Exhibit 4, Tab 2, Schedule 1, Attachment 1, page 2, line 25 are the gas commodity costs associated with the net volume injected to/withdrawn from storage each year as a result of the imbalance between the annual gas supply and annual demand.

In months when demand is higher than the gas supply, gas is required to be withdrawn out of storage to meet customer demand. The commodity costs associated with the net volumes withdrawn from storage are the withdrawal costs. In months where gas supply exceeds customer demand, there is excess supply which is injected into storage. The commodity costs associated with the net volumes injected into storage are the injection costs.

a) Please see Attachment 1 for the detailed calculations of the storage injection and storage withdrawal costs for the 2024 Test Year, as provided at Exhibit 4, Tab 2, Schedule 1, Attachment 1, page 2, line 25 and Exhibit 4, Tab 2, Schedule 1,

Attachment 1, page 4, line 2.

2024 Test Year Calculation of Storage (Injection)/Withdrawal Costs

Line No.	Particulars (10 ³ m ³)	Jan (a)	Feb (b)	Mar (c)	Apr (d)	May (e)	Jun (f)	Jul (g)	Aug (h)	Sep (i)	Oct (j)	Nov (k)	Dec (l)	Total (m)
1	Supplies (1)	1,447,049	1,471,478	858,984	896,239	942,565	1,178,851	1,032,252	835,293	1,085,309	1,112,475	1,084,769	1,545,799	13,491,062
	<u>Throughput Forecast - Sales (2)</u>													
2	Rate 1	912,914	797,316	680,724	417,630	184,735	97,050	97,039	97,003	98,413	250,867	526,822	755,260	4,915,774
3	Rate 6	496,653	490,338	430,042	284,591	153,234	87,467	66,796	66,401	89,393	138,560	264,428	402,960	2,970,864
4	Rate 100	2,090	1,997	1,723	1,452	1,123	665	698	719	577	853	1,218	1,641	14,756
5	Rate 110	9,183	11,140	10,888	8,382	7,615	7,125	6,909	6,637	7,988	7,605	9,104	9,621	102,197
6	Rate 115	199	190	207	160	149	125	101	30	84	98	119	190	1,651
7	Rate 135	46	47	64	180	416	444	469	578	580	582	709	276	4,392
8	Rate 145	92	79	86	56	47	33	17	16	15	16	31	85	574
9	Rate 170	278	539	609	528	508	440	480	128	371	484	576	421	5,360
10	Rate 200	24,387	20,828	19,251	9,882	5,404	3,879	3,390	3,840	3,896	10,162	13,538	21,850	140,306
11	Rate M1	553,831	491,421	415,680	264,631	116,930	70,780	70,276	69,050	70,995	147,673	336,566	465,452	3,073,284
12	Rate M2	70,994	100,872	86,815	67,346	28,353	27,225	30,226	21,845	22,871	50,392	86,842	94,598	688,379
13	Rate M4	6,967	6,282	5,899	4,751	4,225	3,548	3,577	3,789	4,065	4,772	5,570	5,916	59,362
14	Rate M5	172	171	125	97	145	244	167	238	182	219	224	181	2,164
15	Rate M7	4,021	3,975	3,215	2,143	1,486	1,039	1,447	4,129	6,630	2,400	2,391	2,743	35,619
16	Rate M9	2,809	3,008	1,851	969	454	61	35	80	74	1,242	2,768	2,443	15,795
17	Rate M10	-	-	-	-	-	-	-	-	-	-	-	-	-
18	Rate 01	176,454	146,464	127,186	81,641	35,721	16,166	16,282	16,838	17,308	48,096	105,188	143,868	931,213
19	Rate 10	25,102	23,552	21,436	14,241	6,441	5,480	7,058	5,051	5,069	10,431	18,215	22,514	164,590
20	Rate 20	1,140	1,202	955	738	1,022	1,369	1,198	1,448	697	1,018	2,211	2,633	15,631
21	Rate 25	367	156	252	102	78	80	760	569	120	1,698	966	554	5,703
22	Total Throughput Forecast	2,287,698	2,099,576	1,807,008	1,159,521	548,084	323,221	306,925	298,389	329,328	677,168	1,377,486	1,933,207	13,147,613
	<u>Other Forecast (3)</u>													
23	Company Use & Other	2,927	3,002	2,988	2,718	1,697	907	620	358	420	588	1,468	2,106	19,798
24	Unaccounted For Gas (UFG)	44,538	41,131	38,815	28,182	18,664	13,313	14,089	12,770	12,468	16,288	26,727	35,592	302,578
25	Compressor Fuel	30,325	31,520	32,709	9,541	4,838	5,167	8,393	11,508	10,086	12,018	14,531	21,537	192,172
26	Customer Supplied Fuel	(18,769)	(15,530)	(14,322)	(10,338)	(7,819)	(8,198)	(8,707)	(9,048)	(7,230)	(9,181)	(11,390)	(14,985)	(135,518)
27	Total Forecast	59,021	60,123	60,190	30,104	17,380	11,188	14,395	15,588	15,743	19,713	31,335	44,249	379,029
28	Total Throughput Forecast - Sales	2,346,719	2,159,699	1,867,198	1,189,625	565,464	334,410	321,320	313,976	345,071	696,881	1,408,822	1,977,457	13,526,642
29	Storage Fluctuation (4)	899,671	688,221	1,008,214	293,387	(377,101)	(844,441)	(710,932)	(521,316)	(740,238)	(415,594)	324,053	431,658	35,580
30	Weighed Average Reference Price (\$/103m3) (5)	207.493	207.493	207.493	207.493	207.493	207.493	207.493	207.493	207.493	207.493	207.493	207.493	207.493
31	Storage (injection)/withdrawal costs (\$ millions) (4)	186.676	142.801	209.197	60.876	(78.246)	(175.216)	(147.514)	(108.170)	(153.594)	(86.233)	67.239	89.566	7.383

Notes:

- (1) Exhibit 4, Tab 2, Schedule 1, Attachment 1, page 3, line 17.
- (2) Exhibit 3, Tab 3, Schedule 1, Attachment 8, pages 13 to 14, column (d).
- (3) Exhibit 4, Tab 2, Schedule 1, Attachment 1, page 6, column (b), lines 5 to 8.
- (4) Exhibit 4, Tab 2, Schedule 1, Attachment 1, page 4, line 2
- (5) Exhibit 4, Tab 2, Schedule 2, Attachment 3, page 1, column (d), line 16.