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**VIA RESS, EMAIL and COURIER**

September 19, 2014

Ms. Kirsten Walli  
Board Secretary  
Ontario Energy Board  
2300 Yonge Street, 27<sup>th</sup> Floor  
Toronto, Ontario  
M4P 1E4

Dear Ms. Walli:

**Re: EB-2014-0919 (GRAM Application) – Interrogatory Responses**

Enbridge Gas Distribution Inc. (“Enbridge”) filed its October 1, 2014 GRAM Application on September 11, 2014. In response to the GRAM Application, Enbridge received information requests and letters of comment.

Attached to this letter are responses to the information requests received from Ontario Energy Board (“OEB”) Staff, Federation of Rental-housing Providers of Ontario (“FRPO”) and Canadian Manufacturers & Exporters (“CME”).

Comments were received from IGUA with no objection to the relief claimed by EGD.

Yours truly,

*(Original Signed)*

Lorraine Chiasson  
Regulatory Coordinator

Encl.

cc: Mr. Fred Cass, Aird & Berlis LLP  
All Interested Parties EB-2012-0459

BOARD STAFF INTERROGATORY #1

INTERROGATORY

Ref: Exhibit Q4-2, Tab 1, Schedule 1, page 5 to 7: Enbridge noted that throughout the winter Gas Supply, Gas Control and Gas Storage management personnel meet on a weekly basis, sometimes more frequently, to review demand conditions, storage balances and any operational concerns. Enbridge noted that it utilizes a rolling next seven day demand forecast at each weekly meeting. Enbridge also noted that during these meetings the group will discuss and determine how it intends to satisfy the forecast requirement which is equal to the projected demand for the upcoming seven days, budgeted demand and targeted storage balances for the remainder of the winter. Enbridge also noted the more extensive use of spot purchases over ROM or monthly Dawn purchases occurred because the option of minimizing long haul UDC was preferred to monthly or ROM.

- a. Please describe ROM (rest of month) purchases. . Please contrast ROM with inter-month cash market purchases.
- b. Please explain why minimizing long haul UDC was preferred to monthly or ROM purchases.
- c. Does Enbridge purchase gas in the forward market to meet budgeted demand and targeted storage balances? If not, please explain why it does not. If so, please provide the volume of gas purchased in the forward market and the associated prices for the month of March 2014.
- d. What is the maximum daily curtailability available to Enbridge under its interruptible contracts and how much did Enbridge actually curtail during the month of March 2014?
- e. Please provide the decision criteria and supporting analyses, underpinning the curtailment order levels called upon for the month of March 2014. Ref: Exhibit Q4-2, Tab 1, Schedule 1, page 6, paragraph 13: Under bullet number 5, Enbridge refers to other tools available to manage near term demand and spot purchases including peaking and curtailment. Please describe the other tools that are being referenced to.

RESPONSE

- a) Monthly purchases are acquired by issuing RFPs in the month or months prior to when the gas is needed. ROM or rest of month purchases are acquired by similar RFP process intra month. As part of its ongoing review of the required daily Dawn purchases the Company may determine that because of the size of that daily

Witness: D. Small

requirement it would be best to enter into an arrangement with counter parties (through an RFP process) to deliver a fixed daily volume every day throughout the month rather trying to acquire the entire daily requirement each day in the cash market. This type of RFP, while securing delivery of the supply, does not necessarily fix the price to be paid for the supply. In response to Board Staff interrogatory # 4 in EB-2014-0039 (Ex I, Tab 1, Schedule 4) the Company explained “during periods of price volatility suppliers may not be willing to take on the added risk of price exposure. The Company suspects they would be willing to bear that risk only if their supply is hedged either physically or financially (which will also increase its cost). Consequently, suppliers may not bid or may only offer supply based on a daily index.” In contrast to a ROM purchase, inter-month cash market purchases involve buying gas in the daily spot market.

- b) Pursuant to the Settlement Agreement in EB-2012-0459, EGD undertook to use best efforts to mitigate UDC on long haul contracts. Throughout the winter the Company recognized that by acquiring incremental supplies at Dawn and leaving the long haul FT capacity empty that customers would have been exposed to the associated UDC costs on top of the cost of acquiring the Dawn supplies. Therefore when possible the Company chose to utilize the available long haul capacity filling it with monthly supply before acquiring Dawn supplies through monthly, ROM or spot purchases.
- c) Purchasing gas in the forward market can be achieved in one of two ways. The first would be to utilize a gas supply risk management program whereby the price for supply in a particular forward month can be locked into using a financial instrument. Enbridge does not operate a hedging program pursuant to the Board’s Decision in EB-2006-0034 in which Enbridge was directed to cease gas supply risk management activities. The second would be to issue an RFP similar to the one described in response a) above however, unlike an RFP for ROM this type of RFP would be issued prior to the start of the month that the gas would want to be delivered. In the absence of long haul FT EGD would have issued a forward month RFP at Dawn to replenish storage balances. Throughout the winter of 2013/14 the Company issued monthly RFP’s for supply required to fill the unutilized long haul capacity at Empress or AECO instead. As discussed at Exhibit Q4-2, Tab 1, Schedule 1, page 7, paragraph 13 the “extensive use of spot purchases over ROM or monthly Dawn purchases” at Dawn occurred because forward month RFPs at Empress or AECO were used rather than forward month or ROM RFPs at Dawn. In March spot purchases at Dawn were required to meet actual demand on the day in

the first half of the month and were used to meet demand as well as replenish storage balances later on in the month when prices settled at lower levels.

- d) The level of curtailment is based upon the Contract Demand of those customers who have entered into interruptible contracts. The total Contract Demand in the winter of 2014 is 5,838.0  $10^3$  m<sup>3</sup>/day. However, for planning purposes the Company assumes that 75% of the Contract Demand is the amount of demand being avoided by interrupting these customers (to allow a margin of error for non-compliance) therefore the Company expects a reduction in demand of 4,378.0  $10^3$  m<sup>3</sup> or approximately 165,000 GJ/day when all interruptible customers are asked to curtail. In the month of March the Company called for curtailment on 5 days which would equal 21,890.0  $10^3$  m<sup>3</sup> or 825,000 GJ's, thereby offsetting an equivalent amount of Dawn purchases.
- e) EGD curtailed customers on the following days in March – the 3<sup>rd</sup>, 4<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup> and 17<sup>th</sup>. The decision on whether or not to curtail interruptible customers is made based upon the week ahead forecasted demand and what supplies are available to meet that demand. For example what is the expected deliverability from storage? Is the long haul capacity fully utilized? How much gas is being purchased at Dawn? Is peaking services available? Is there a need for curtailment? For instance, at a meeting held on March 13<sup>th</sup> the group reviewed week ahead forecast and determined that curtailment was necessary for the 15<sup>th</sup>, 16<sup>th</sup> and the 17<sup>th</sup>. The Company was already maximizing its long haul contracts and was already buying approximately 750,000 GJ's at Dawn (this is around the upper limit EGD believes is reasonable to purchase on the day). Deliverability from storage was expected to be in the 650,000 GJ/day range and the Company was also planning to maximize its peaking contracts. Even with all of the above a shortfall remained to meet demand therefore EGD made the decision to curtail.

As for other tools, if the Company had exhausted its' contracted peaking service for a particular day (or days) and curtailment over the same period then other option would be to contract for incremental transport i.e. STFT or IT from TCPL. EGD avoids using IT in the winter to the best of its ability (although in March EGD did use IT on Vector where available to take advantage of more favourable pricing at Chicago versus Dawn) and did not use STFT this winter.

BOARD STAFF INTERROGATORY #2

INTERROGATORY

Ref: Exhibit Q4-2, Tab 1, Schedule 1, page 8, paragraph 16: Enbridge noted that the most significant driver of the current QRAM PGVA adjustment is related to March (2014). Enbridge noted that the actual purchase costs for the month of March 2014 requires an increase to the PGVA in the amount of \$324 million which is approximately \$175 million higher than forecast in the April QRAM (EB-2014-0039).

- a. For each day that incremental purchases were made for March, please provide a table that depicts the volume purchased, the delivery period, the purchased location, the weighted average price (in \$ CAN/GJ), the range of bids received, and the market expectations going forward.

RESPONSE

Before discussing the volumes that were acquired in the month of March it is necessary to reiterate the changes in demand throughout the month that the Company was faced with. The following is a summary of the management of March supply to meet the changing demand.

To begin, the following table provides the budgeted supply plan for March of 2014 alongside the revised supply plan described further below.

(Bcf)	Supply Plan	
	Budget	Revised
Budgeted Demand	50.2	50.2
<u>Supply</u>		
Long-Haul	8.4	18.6
Direct Shipper	9.0	9.0
Vector	8.4	8.4
Other	0.3	0.5
Dawn Supplies	4.5	-
Subtotal	30.6	36.5
Storage Deliverability	19.6	14.5
Total Supply	50.2	51.0
(Surplus)/Shortfall	-	(0.8)

The following are details of what was actually know at a particular time when decisions were made along with those corresponding supply decisions for the month of March.

February 12, 2014

What was known: The continued colder than normal weather that had already been experienced throughout February had resulted in declining storage balances which translated into declining deliverability expected to be available to meet March demand. Also, prices at Dawn were trading in the 12 - 15 USD/Mmbtu range at that time and forecasted prices for Empress supply in March were expected to be approximately \$5 /GJ. Taking this into consideration, the Company needed to choose between either 1) purchase even greater volumes at Dawn and reduce storage withdrawals in order to achieve target storage balances (as per the budget) at the end of February or 2) fill the available long haul capacity (budgeted to be unutilized in March) to offset the loss in deliverability.

Decision made: The Company chose to utilize 100 % of its contracted long haul transportation in March rather than purchase additional supplies at Dawn in February.

Witness: D. Small

By filling the planned UDC the forecast showed EGD would return to targeted storage balances at the end of March and left us with 0.8 Bcf to meet additional demand (seen in Revised Supply Plan column in the table above). This strategy was consistent with EGD's commitment to use best efforts to mitigate UDC.

The following table provides details of the weekly re-forecasted demand for the month per EGD's forecasting and compares the resulting average daily increased demand with actual purchases during the same days.

(Bcf)	Re-forecasted Monthly Demand				
	26-Feb	5-Mar	12-Mar	19-Mar	26-Mar
Budgeted Demand	50.2	50.2	50.2	50.2	50.2
Estimated Demand	54.0	57.4	60.2	62.9	64.6
Estimated Increase in Demand	3.8	7.2	10.0	12.7	14.4
Est. Weekly Increase in Demand	3.8	3.4	2.8	2.7	1.7
Days	5.0	7.0	7.0	7.0	5.0
Est. Average Daily Increased Demand	0.8	0.5	0.4	0.4	0.3
Actual Average Daily & ROM Purchases	0.8	0.8	0.8	0.8	0.8

February 26, 2014

What was known: Forecasted demand for March was expected to increase by 3.8 Bcf. EGD had already made the decision to fill all the available long haul.

Decisions made: Since the shortfall was related to a revised 7 day forecast and therefore was all expected to occur in the first few days of the month the decision was made to manage this requirement with daily spot purchases. Further, faced with continued colder than anticipated weather in the first few days of March, the Company acquired peaking service on March 4th and 5th and curtailed its interruptible customers on March 3rd and 4th.

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March 5, 2014

What was known: The revised forecast of continued colder than normal weather in the upcoming week indicated that storage withdrawals and the volumes to be received from the 100% utilization of the long haul FT TCPL contracts would not be enough to meet demand.

Decisions made: Again the shortfall was related to a revised forecast for the next 7 days so most of the shortfall had to be met with daily Dawn spot supplies in the 650,000 GJ/d range depending on the days actual weather. Also at this time EGD decided it would be necessary to issue an RFP for 125,000 GJ/day Rest of Month (ROM) to help reduce purchases on the day and help fill requirements to the end of the month.

March 12, 2014

What was known: The revised forecast of continued colder than normal weather in the upcoming week again indicated that storage withdrawals and the volumes to be received from the 100% utilization of the long haul FT TCPL contracts would not enough to meet demand.

Decisions made: The shortfall was related to a revised forecast for the next 7 days so most of the shortfall had to be met with daily Dawn spot supplies in the range of 650,000 GJ/d depending on the day's actual weather. EGD also decided it would be necessary to call for Curtailment and for Peaking Service for March 15th through 17th. On March 17th (the following Monday) with continuing concerns regarding the longer term effects of the colder than forecast weather expected for the remainder of March and the increasing risk of a steep drop off of storage deliverability EGD decided to issue a second RFP for ROM supply for 200,000 GJ/day. In looking at pricing of Chicago vs Dawn EGD also utilized some Vector IT when it was available and filled it at Chicago rather than purchasing at Dawn.

March 19, 2014

What was known: The revised forecast of continued colder than normal weather in the upcoming week again indicated that storage withdrawals and the volumes to be received from the 100% utilization of the long haul FT TCPL contracts would not enough to meet demand. Storage balances were lower than the Company had seen for many years continuing the risk of a steep drop off in deliverability. Pricing at Dawn had stabilized compared to late February and early March.

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Decisions made: EGD decided to continue purchasing Dawn spot supplied in the range of 650,000 GJ/d to meet the increased demand and defend storage deliverability in case of further requirements, due to cold weather, in late March and/or the early part of April. In looking at pricing of Chicago vs Dawn EGD also utilized some Vector IT when it was available and filled it at Chicago rather than purchasing at Dawn.

March 26, 2014

What was known: The revised forecast of continued colder than normal weather in the upcoming week again indicated that storage withdrawals and the volumes to be received from the 100% utilization of the long haul FT TCPL contracts would not enough to meet demand. Storage balances were lower than the Company had seen for many years continuing the risk of a steep drop off in deliverability. Pricing at Dawn had stabilized compared to late February and early March.

Decisions made: EGD decided to continue purchasing Dawn spot supplied in the range of 650,000 GJ/d to meet the increased demand and defend storage deliverability in case of further requirements, due to cold weather, in the early part of April.

#### Purchase Details

The March estimate, prepared in the first few days of March, for the April QRAM had assumed a total volume purchased in western Canada of 19.2 PJ's at an average cost of \$5.27 /GJ, 5.8 PJ's in Chicago at an average cost of \$6.97/GJ, Delivered supply at Dawn of 10.6 PJ's at an average cost of \$11.00/GJ and no Peaking Service.

Appendix A attached provides the actual daily supplies by receipt point broken down by acquisition type i.e. Annual, Seasonal, Monthly, ROM or Daily as well as the total cost payable for each type of supply. Appendix B provides the daily index for each receipt point.

As discussed in response to Board Staff #1 (Exhibit I, Tab 1, Schedule 1), prices accepted through the RFP process will be based upon the price offering of the supplier looking to sell EGD gas. The price being quoted in the RFP will be tied to the particular index for the receipt point that the Company will be accepting the gas and will either be the monthly index or the daily index for that particular point. For example in the month of February the Company sent out a monthly RFP for Empress/NIT supply for the month of March. The Company accepted 10 different RFP's for a total volume of 245,000 GJ/day from 6 different

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suppliers. Of the 10 RFPS' that were accepted 8 deals were based upon the daily index plus a premium ranging from zero cents to 18 cents/GJ. The two deals that were accepted that were tied to the monthly index also carried a slight premium.

A summary of the bids are provided below:

Empress

20,000 from XXXX	@ CGPR Monthly Index (line 5A) +\$0.12
30,000 from XXXX	@ CGPR Daily Index (line 5A) +\$0.1800
10,000 from XXXX	@ CGPR Daily Index (line 7A) +\$0.15
25,000 from XXXX	@ CGPR Daily Index (line 7A) +\$0.09
25,000 from XXXX	@ CGPR Daily Index (line 5A) +\$0.11
20,000 from XXXX	@ CGPR Daily Index (line 7A) +\$0.1500
<u>15,000</u> from XXXX	@ CGPR Daily Index (line 7A) +\$0.16
145,000	

NIT

30,000 from XXXX	@ CGPR Daily Index (line 5A) +\$0.0025
50,000 from XXXX	@ CGPR Daily Index (line 5A) flat
<u>20,000</u> from XXXX	@ CGPR Monthly Index (line 7A) +\$0.0175
100,000	

Appendix B provides the daily March index for various receipt points.

	Henry Hub GD US/MM	AECO CGPR Daily CA/GJ	Empress Daily CGPRD CA/GJ	Dawn GD US/MM	Chicago City GD US/MM	CDA - Landed price NGX US/MM	Iroquois GD US/MM
1-Mar-14	4.70	7.80	7.32	41.69	36.67	43.98	32.18
2-Mar-14	4.70	7.58	7.09	41.69	36.67	43.98	32.18
3-Mar-14	4.70	7.88	5.28	41.69	36.67	43.98	32.18
4-Mar-14	6.94	7.19	5.23	37.37	24.22	38.07	30.13
5-Mar-14	7.94	6.13	7.35	21.40	10.71	22.73	23.69
6-Mar-14	6.42	5.35	7.78	13.31	8.94	14.28	17.41
7-Mar-14	4.84	4.66	32.58	11.14	6.82	10.97	11.29
8-Mar-14	4.77	4.67	32.36	15.62	9.08	15.83	16.10
9-Mar-14	4.77	4.51	32.66	15.62	9.08	15.83	16.10
10-Mar-14	4.77	4.34	26.44	15.62	9.08	15.83	16.10
11-Mar-14	4.64	4.47	8.44	7.69	4.99	7.51	6.90
12-Mar-14	4.66	4.52	8.23	8.29	5.46	8.33	8.25
13-Mar-14	4.68	4.38	6.55	7.73	5.33	10.61	16.46
14-Mar-14	4.39	4.31	15.47	5.55	4.63	5.54	5.86
15-Mar-14	4.39	4.53	15.31	5.92	5.00	7.40	9.20
16-Mar-14	4.39	4.46	15.14	5.92	5.00	7.40	9.20
17-Mar-14	4.39	4.51	7.15	5.92	5.00	7.40	9.20
18-Mar-14	4.58	4.47	7.21	5.96	4.70	6.24	7.21
19-Mar-14	4.45	4.45	6.43	5.79	4.83	5.88	6.02
20-Mar-14	4.44	4.59	4.89	5.56	4.71	5.60	5.43
21-Mar-14	4.35	4.53	5.37	5.22	4.60	5.26	5.29
22-Mar-14	4.31	4.55	5.29	6.67	4.77	6.90	6.80
23-Mar-14	4.31	4.45	5.34	6.67	4.77	6.90	6.80
24-Mar-14	4.31	4.88	5.38	6.67	4.77	6.90	6.80
25-Mar-14	4.40	5.55	5.17	7.14	5.01	7.47	7.86
26-Mar-14	4.50	4.86	5.11	8.14	5.19	8.37	9.04
27-Mar-14	4.43	4.58	4.84	6.13	4.70	6.22	6.22
28-Mar-14	4.39	4.56	5.95	5.16	4.64	5.19	5.03
29-Mar-14	4.48	4.40	5.85	5.04	4.63	5.07	4.93
30-Mar-14	4.48	4.44	6.28	5.04	4.63	5.07	4.93
31-Mar-14	4.48	4.44	6.94	5.04	4.63	5.07	4.93
Average	4.77	5.03	10.34	12.46	9.35	13.09	12.25

Actual Dawn Purchases in March					Actual Purchases in Chicago					
Daily Spot Purchases	ROM Volume Acquired via 1st RFP	ROM Volume Acquired via 2nd RFP	Total		Annual	Seasonal	Monthly	Daily		
GJ's	GJ's	GJ's	GJ's		Mmbtu's	Mmbtu's	Mmbtu's	Mmbtu's	Mmbtu's	
1	720,742	-	-	720,742	1	50,000	50,000	40,000	36,848	176,848
2	695,555	-	-	695,555	2	50,000	50,000	40,000	36,848	176,848
3	808,974	-	-	808,974	3	50,000	50,000	40,000	36,848	176,848
4	587,455	-	-	587,455	4	50,000	50,000	40,000	36,848	176,848
5	790,027	-	-	790,027	5	50,000	50,000	40,000	36,848	176,848
6	739,976	-	-	739,976	6	50,000	50,000	40,000	41,848	181,848
7	539,807	-	-	539,807	7	50,000	50,000	40,000	31,848	171,848
8	624,448	131,882	-	756,330	8	50,000	50,000	40,000	104,848	244,848
9	619,620	131,882	-	751,502	9	50,000	50,000	40,000	96,848	236,848
10	634,477	131,882	-	766,359	10	50,000	50,000	40,000	96,848	236,848
11	487,047	131,882	-	618,929	11	50,000	50,000	40,000	93,876	233,876
12	737,250	131,882	-	869,132	12	50,000	50,000	40,000	96,876	236,876
13	681,041	131,882	-	812,923	13	50,000	50,000	40,000	101,876	241,876
14	232,112	131,882	-	363,994	14	50,000	50,000	40,000	101,876	241,876
15	627,758	131,882	-	759,640	15	50,000	50,000	40,000	171,848	311,848
16	627,758	131,882	-	759,640	16	50,000	50,000	40,000	171,848	311,848
17	626,215	131,882	-	758,097	17	50,000	50,000	40,000	171,848	311,848
18	284,864	131,882	-	416,746	18	50,000	50,000	40,000	95,519	235,519
19	174,113	131,882	221,562	527,557	19	50,000	50,000	40,000	103,519	243,519
20	181,996	131,882	221,562	535,440	20	50,000	50,000	40,000	95,519	235,519
21	179,585	131,882	221,562	533,029	21	50,000	50,000	40,000	105,469	245,469
22	451,064	131,882	221,562	804,508	22	50,000	50,000	40,000	36,848	176,848
23	503,817	131,882	221,562	857,261	23	50,000	50,000	40,000	36,848	176,848
24	451,064	131,882	221,562	804,508	24	50,000	50,000	40,000	36,848	176,848
25	394,198	131,882	221,562	747,642	25	50,000	50,000	40,000	36,848	176,848
26	504,944	131,882	221,562	858,388	26	50,000	50,000	40,000	91,519	231,519
27	340,285	131,882	221,562	693,729	27	50,000	50,000	40,000	60,733	200,733
28	377,805	131,882	221,562	731,249	28	50,000	50,000	40,000	36,848	176,848
29	402,101	131,882	221,562	755,544	29	50,000	50,000	40,000	35,848	175,848
30	402,101	131,882	221,562	755,544	30	50,000	50,000	40,000	35,848	175,848
31	401,101	131,882	221,562	754,544	31	50,000	50,000	40,000	35,848	175,848
	15,829,308	3,165,158	2,880,306	21,874,772		1,550,000	1,550,000	1,240,000	2,310,590	6,650,590

Total Cost \$US (million)	274.69	Total Cost \$US (million)	65,179,521.98
# of Transactions	334	# of Transactions	103
# of Counterparties	14	# of Counterparties	8

Actual Western Canadian Purchases					Actual Peaking Service		
Annual	Seasonal	Monthly	Daily		Daily		
GJ's	GJ's	GJ's	GJ's	GJ's	Mmbtu's		
1	80,000	100,000	245,000	226,122	651,122	1	-
2	80,000	100,000	245,000	226,122	651,122	2	-
3	80,000	100,000	245,000	228,122	653,122	3	-
4	80,000	100,000	245,000	228,822	653,822	4	150,000
5	80,000	100,000	245,000	228,322	653,322	5	120,000
6	80,000	100,000	245,000	228,422	653,422	6	-
7	80,000	100,000	245,000	208,322	633,322	7	-
8	80,000	100,000	245,000	193,617	618,617	8	-
9	80,000	100,000	245,000	180,117	605,117	9	-
10	80,000	100,000	245,000	183,117	608,117	10	-
11	80,000	100,000	245,000	189,772	614,772	11	-
12	80,000	100,000	245,000	227,922	652,922	12	110,000
13	80,000	100,000	245,000	228,322	653,322	13	90,000
14	80,000	100,000	245,000	228,322	653,322	14	-
15	80,000	100,000	245,000	207,322	632,322	15	40,000
16	80,000	100,000	245,000	204,822	629,822	16	40,000
17	80,000	100,000	245,000	203,822	628,822	17	40,000
18	80,000	100,000	245,000	228,422	653,422	18	-
19	80,000	100,000	245,000	228,122	653,122	19	-
20	80,000	100,000	245,000	228,222	653,222	20	-
21	80,000	100,000	245,000	228,322	653,322	21	-
22	80,000	100,000	245,000	228,422	653,422	22	-
23	80,000	100,000	245,000	228,422	653,422	23	-
24	80,000	100,000	245,000	228,422	653,422	24	-
25	80,000	100,000	245,000	228,322	653,322	25	-
26	80,000	100,000	245,000	227,222	652,222	26	-
27	80,000	100,000	245,000	228,322	653,322	27	-
28	80,000	100,000	245,000	228,222	653,222	28	-
29	80,000	100,000	245,000	227,822	652,822	29	-
30	80,000	100,000	245,000	228,322	653,322	30	-
31	80,000	100,000	245,000	228,322	653,322	31	-
	2,480,000	3,100,000	7,595,000	6,816,317	19,991,317		590,000

Totals Cost \$CDN (million)	108.8	Total Cost \$US (million)	11.9
# of Transactions	354	# of Transactions	13
# of Counterparties	17	# of Counterparties	3

BOARD STAFF INTERROGATORY #3

INTERROGATORY

Ref: Exhibit Q4-2, Tab 1, Schedule 1, page 8, paragraph 17: Enbridge provided a summary of variances as can be seen in the screenshot below:

The variances in the table mentioned above can be summarized as follows:

\$(millions)	Budget Volume Variance	Incremental Volume Variance	Total Variance
Western Canadian Supplies	2.3	3.4	5.7
Peaking Supplies	0.0	10.3	10.3
Chicago Supplies	19.0	7.2	26.2
Delivered Supplies	0.7	119.3	138.0

- a. Please confirm that the incremental volume variance for Delivered Supplies should read 137.3 instead of 119.3.

RESPONSE

Confirmed. The incremental volume variance for Delivered Supplies should read 137.3 instead of 119.3.

Witness: D. Small

BOARD STAFF INTERROGATORY #4

INTERROGATORY

Ref: Exhibit Q4-2, Tab 1, Schedule 1, page 10 to 11 and Exhibit Q4-2, Tab 1, Schedule 1, Appendix A, page 1: Enbridge noted that the variance in pricing (for western Canadian supplies) combined with the increase in Chicago pricing contributed to approximately \$25 million of the total variance.

- a. Please confirm that the bottom half of the table in Exhibit Q4-2, Tab 1, Schedule 1, Appendix A, page 1 are actual figures instead of estimated values.
- b. Board staff is unable to reconcile the variance amounts mentioned in the preamble above with the variance amounts in the table provided in Exhibit Q4-2, Tab 1, Schedule 1, Appendix A, page 1. Please provide this reconciliation.

RESPONSE

- a) The bottom half of the table in Exhibit Q4-2, Tab 1, Schedule 1, Appendix A, page 1 are actuals.
- b) The evidence stated that the variance in pricing for western Canadian supplies was slightly higher in the actuals than assumed in the estimate and that this had a negligible impact on the PGVA. This comment was in reference to the total variance of \$5.7 million in the table provided on page 8 of the evidence. The inference to the approximate variance of \$25 million referred to in the evidence was intended to identify the impact of variances in Chicago prices only.

BOARD STAFF INTERROGATORY #5

INTERROGATORY

Board staff also notes that Enbridge recalculated its utility price based upon a 21-day average of various indices from August 1, 2014 to August 29, 2014 for 12 months commencing on October 1, 2014. This results in a \$3.724/GJ reference price at Empress. Board staff also notes that Union Gas Ltd.'s<sup>1</sup> recalculated utility price used a 21-day average from July 31, 2014 to August 29, 2014 which results in a reference price of \$3.732/GJ also at Empress.

- a. Please confirm that this slight difference is the result of the timing underpinning the 21-day strip and the application of the foreign exchange rate.

RESPONSE

The slight difference in the underlining Empress price calculated by Enbridge and the price calculated by Union is the result of the timing underpinning the 21-day strip and the application of foreign exchange rates.

FRPO INTERROGATORY #1

INTERROGATORY

**Reference: EGD Reply Submission, March 25th, 2014, page 11**

Preamble: The above reference includes the following sentences:

*"As discussed above, the main difference between average unit costs incurred by Enbridge and Union occurred in the month of February. In order for Enbridge to have "layered" on its purchases, Enbridge would have been required to purchase additional volumes in January in order to maintain higher-than-target deliverability in February. Such an action would have been a significant deviation from the gas supply plan developed by Enbridge and approved by the Board and any such deviation would have meant attendant risks for Enbridge."*

Please file the interrogatory responses of EGD in EB-2014-0039 and the EGD reply submission of March 25, 2014 in that same proceeding.

RESPONSE

These documents can be found on EGD's website at [www.enbridgegas.com/ratecase](http://www.enbridgegas.com/ratecase) and in the Board's webdrawer. Please see EB-2014-0039 for EGD's interrogatory responses filed on March 19, 2014 (Exhibit I, Tabs 1 to 3) and April 16, 2014 (Exhibit I, Tabs 4 to 6), and the Company's reply submission dated March 25, 2014.

Witness: D. Small



FRPO INTERROGATORY #2

INTERROGATORY

**Reference: EGD Reply Submission, March 25th, 2014, page 11**

Preamble: The above reference includes the following sentences:

*"As discussed above, the main difference between average unit costs incurred by Enbridge and Union occurred in the month of February. In order for Enbridge to have "layered" on its purchases, Enbridge would have been required to purchase additional volumes in January in order to maintain higher-than-target deliverability in February. Such an action would have been a significant deviation from the gas supply plan developed by Enbridge and approved by the Board and any such deviation would have meant attendant risks for Enbridge."*

Please provide the specific aspects of the Enbridge Gas Supply Plan that EGD believed could not be varied due to Board approval and a reference to those specific approvals.

RESPONSE

The specific aspects of the Enbridge Gas Supply Plan that was approved in EB-2012-0459 referred to are the following:

- 1) Enbridge's gas supply plan assumes maximum storage deliverability of 2.18 PJ/day until late January to early February to meet design day or near design demand requirements (see Exhibit Q4-2, Tab 1, Schedule 4, page 4). While this is the maximum deliverability that is used to plan how EGD will meet design demand EGD cannot rely on this level of withdrawals daily as its total storage is 121 PJs which would be depleted in approximately 55 days whereas we expect to withdraw from storage for at least each of the days of winter which lasts from November 1 to March 31 (151 days).

Month	14-Jan	14-Feb	14-Mar
End of Month % full	0.47	0.24	0.06
End of month storage balance (PJ)	57	29	7
Average daily withdrawal (PJ)	1.2	1.0	0.7

Witness: D. Small

EGD's 2014 supply plan had a planned average withdrawal of 0.7 PJ/day in March. The targeted decline in storage deliverability and corresponding balances underpin the development of the Company's budgeted gas purchase plan, and gas costs forecast that is approved by the Board and used in the derivation of rates to be collected from customers.

- 2) The other aspect of the gas supply plan that has been part of the EGD plan historically is the use of a seven day rolling forecast combined with budgeted weather for the rest of the winter, rather than the use of longer term demand forecast for determining adjustments to the gas supply plan.
- 3) Finally, as a result of the additional long haul contracted to meet seasonal needs EGD accepted to make best efforts to mitigate long haul demand charges in EB-2012-0459. The strategy adopted was to utilize long haul transport as the first line of defense for maintaining storage balances rather than Dawn forward purchases. The maintenance of declining deliverability along with the rolling seven day forecast meant that EGD had to rely on Dawn daily purchases to supplement demand spikes. Dawn daily prices and several other market hubs witnessed greater volatility due to the 1 in 37 winter.

One or all of the above strategies could be varied to reduce exposure to Dawn daily purchases in response to demand spikes in future year gas supply plans. As noted in Board Staff Interrogatory #2 (Exhibit I, Tab 1, Schedule 2), EGD's daily purchases were approximately 800 TJ/d per day. While these were not approved as part of the 2014 supply plan, and were therefore not available for this past winter, the following could be considered for future years.

- 1) Maintaining full deliverability past the end of January or early February later into the winter. This would require additional gas purchases in the winter to maintain the required storage balances to meet higher deliverability or acquiring additional storage capacity. For example if we maintained the same withdrawal capability in March as we did in January the additional gas purchases on a month ahead basis within the winter would have been approximately 26 PJs cumulative for both February and March. EGD would have been able to withdraw an extra 0.5 PJ/d in March mitigating a large proportion of the March daily Dawn purchases.
- 2) Using an extended long term weather forecast rather than a seven day rolling forecast in conjunction with budgeted weather to make adjustments to the gas supply plan. If the extended forecast calls for a colder than budget winter, this would drive additional gas purchases earlier to defend late season deliverability.

For example if EGD had adopted a long term forecast that predicted March as 20% colder than budget we could have purchased an additional 10 PJs through month ahead purchases. This would have displaced approximately 0.3 PJ/d of purchases in March. The combination of strategies 1 and 2 would have eliminated daily purchases.

- 3) Forward month Dawn purchases in preference to mitigating UDC on long haul as the first line of defense to maintain storage balances and retaining a certain amount of UDC on long haul transport to source incremental supply in Alberta on high demand days. For example for March budgeted UDC was approximately 10 PJs. EGD could have retained all or a portion of this to meet daily demand spikes and bought 10 PJs on a month ahead basis at Dawn to meet storage targets, displacing between 0.1 to 0.3 PJ/d of daily Dawn purchases in March.

All of these strategies reduce exposure to purchase daily Dawn supplies and associated price spikes by retaining reserve capacity either through storage at Dawn or unutilized transport from an alternative basin, such as Alberta. However if the weather is near or below (less than) budget these strategies would result in high storage balances at the end of winter and higher unmitigated demand charges on long haul transport. For instance EGD would have exited March with approximately 40% of inventories in place (January targets) had budget and actual weather been the same with the first strategy. EGD is willing to consider these strategies for its 2015 supply plan.

FRPO INTERROGATORY #3

INTERROGATORY

**Reference: EGD Reply Submission, March 25th, 2014, page 11**

Preamble: The above reference includes the following sentences:

*"As discussed above, the main difference between average unit costs incurred by Enbridge and Union occurred in the month of February. In order for Enbridge to have "layered" on its purchases, Enbridge would have been required to purchase additional volumes in January in order to maintain higher-than-target deliverability in February. Such an action would have been a significant deviation from the gas supply plan developed by Enbridge and approved by the Board and any such deviation would have meant attendant risks for Enbridge."*

Please provide a description with specific numeric values the "higher-than-target deliverability" in February.

RESPONSE

Please see the response to FRPO Interrogatory #2 found at Exhibit I, Tab 2, Schedule 2.

Witness: D. Small

FRPO INTERROGATORY #4

INTERROGATORY

**Reference: EGD Reply Submission, March 25th, 2014, page 12**

Preamble: EGD states that gas supply personnel met on a weekly basis.

Please provide all internal minutes from these meetings and all correspondence (emails, etc.) that include the analysis of alternatives reviewed and actions taken as a result of colder than normal temperatures from the meetings of December to March.

RESPONSE

The Company respectfully declines to provide the weekly minutes of these meetings. The normal mechanistic QRAM process is not does not allow for the level of detailed review contemplated here and the Board has set a threshold for considering more detailed review of QRAMs which has not been met in this application. However, in an effort to be of assistance to FRPO the Company has provided additional information regarding the changes in weekly budget demand and the actions taken. Please see response to Board Staff Interrogatory #2 (Exhibit I, Tab 1, Schedule 2).

Witness: D. Small

FRPO INTERROGATORY #5

INTERROGATORY

**Reference: EGD Reply Submission, March 25th, 2014, page 12**

Preamble: EGD states that gas supply personnel met on a weekly basis.

Please provide the specifics of the gas supply plan for December to March that showed gas supply to be received for each month by source including expectations of unutilized transport.

- a) Please provide specific information that was used to draw the conclusion that the deficit in storage plan could be eliminated in the subsequent period by utilizing the full transport contracted.
- b) Please provide the daily prices for the forward prompt month at Dawn throughout the months of December to March.
- c) Please provide the daily price at Dawn from December to March.
- d) For the gas brought in by peaking service, please provide the nature of the contract(s) including demand charges, notice, delivery point, etc.

RESPONSE

This QRAM application does not cover months before March except to deal with minor variations in final bills for February. As such the information provided below covers only the month of March for your requests.

- a) Please see response to Board Staff Interrogatory # 2 (Exhibit I, Tab 2, Schedule 6)
- b) The table provides the monthly Dawn price reported on a daily basis when March was trading as the near month

Witness: D. Small

US\$/Mmbtu

30-Jan-2014	5.621
31-Jan-2014	5.893
03-Feb-2014	5.805
04-Feb-2014	6.425
05-Feb-2014	6.03
06-Feb-2014	5.891
07-Feb-2014	5.945
10-Feb-2014	5.679
11-Feb-2014	6.124
12-Feb-2014	6.272
13-Feb-2014	6.973
14-Feb-2014	7.584
17-Feb-2014	7.584
18-Feb-2014	8.451
19-Feb-2014	9.949
20-Feb-2014	10.164
21-Feb-2014	12.285
24-Feb-2014	11.495
25-Feb-2014	11.096
26-Feb-2014	13.355

- c) Please see response to Board Staff Interrogatory # 2 (Exhibit I, Tab 1, Schedule 2).
- d) EGD requires Peaking Service to be delivered to both the CDA and to the EDA. Contracting for this service is through an RFP process. Prior to the start of the 2013/14 winter EGD sent out RFP's as has been the practice in the past looking for suppliers willing to deliver a fixed daily volume and an annual volume. The annual volume is based upon the daily volume being delivered for a maximum number of days (10 days). It is at the Company's discretion when it wants to call on this service. The price payable for Peaking Service will be tied to a particular daily index (i.e., Iroquois) and will include a demand charge as well. In 2014 EGD entered into 8 different peaking arranges and the total demand charge payable under these contracts was \$1.2 million US. However, the extreme cold in January and February exhausted the volume available to the Company under these peaking arrangements requiring EGD to acquire additional peaking service to be available in March.

FRPO INTERROGATORY #6

INTERROGATORY

**Reference: Exhibit I, Tab 1, Schedule 1, Attachment 1 and EB-2012-0459  
Exhibit K8.2**

Preamble: In response to Board staff inquiry, Enbridge prepared Attachment 1 and stated in their response:

*"The attached table provides a breakdown of the effect of higher prices for Enbridge's planned or budgeted purchases as well as the effect higher prices had on the incremental purchases required to meet the increased demand."*

We would like to understand another view of last winter. In Exhibit K8.2, Enbridge provided the targeted and actual levels for storage at the end of each month starting with November. The Exhibit has been updated subsequently to include additional months.

For the entire period of November to August and using the format provided in Attachment 1, between columns 8 and 9, please add additional columns for Target Volume showing the Budget and Actual price consistent with the monthly actual price for delivered supply for that month in the table (column 7) and the resulting variance for those volumes. Target Volume would be defined as the volume needed to be purchased (or not purchased in later winter months as a result of earlier purchases) to meet the Targeted Volume in storage per Exhibit K8.2. For greater clarity, the intent is to show a hypothetical case of buying delivered supply throughout the winter to meet the targeted level of storage at month end throughout the winter.

- a) Please ensure to include subtotals similar to rows 3.5 and 3.6 and a grand total for the winter.

RESPONSE

Enbridge continues to believe that a discussion of the Company's gas supply plan and hypothetical "what ifs" scenarios are more suited as part of a broader discussion within the Natural Gas Review or in conjunction with the planned annual stakeholder meeting that will be scheduled once the Company has filed its gas supply plan. However, to assist in meeting FRPO's desire to understand last winter more clearly and what

Witness: D. Small



alternative planning assumptions could have yielded with respect to March, please see response to FRPO Interrogatory #2 (Exhibit I, Tab 2, Schedule 2).

With respect to the specific scenario, it is not clear how FRPO's alternate view of last winter differs from how EGD managed its purchases in accordance with its gas supply plan. The only difference may be that it seems in FRPO's opinion EGD should have based its month ahead purchases on a long term weather forecast. We have already explained why this is not our practice because any long term forecast is prone to vary widely from actual weather over time. The reason we could not catch up to storage targets was the weather deteriorated relentlessly not allowing us to do so. EGD did act in a manner very similar to what it seems FRPO suggests would be an alternate view of this past winter.

To re-iterate what we said in evidence regarding weather forecasts, EGD utilizes a rolling next seven day demand forecast at each weekly meeting. A seven day forecast is utilized as a longer period will contain greater uncertainty. Generally, the longer the forecasting horizon the greater the uncertainty in the longer dated components of the forecast. A longer forecasting horizon could, for example, result in procurement decisions which lead to storage balances that are either significantly higher or lower than planned depending on the actual demand conditions that occur relative to forecast.

FRPO INTERROGATORY #7

INTERROGATORY

**Reference: EB-2014-0191 Exhibit Q4-2 Tab 1 Schedule 1 Page 4**

Preamble: Paragraph 10 on the above referenced page starts with the following:

*"EGD's gas supply plan fundamentally changed in 2014 as a result of the Settlement Agreement on Aspects of Enbridge Gas Distribution 2014 Gas Supply Plan".*

Please summarize the changes made to the Gas Supply Plan as a result of the Settlement Agreement, providing, at a minimum, the changes to:

- a) the numeric values and percentage changes in storage targets as a result of the additional FT
- b) dates where critical reductions in storage deliverability would be breached (i.e., storage deliverability is ratcheted due to storage balance threshold is crossed)
- c) any other significant variable that contributed to decisions affecting quantity of gas purchased throughout the winter

RESPONSE

Please see response to FRPO Interrogatory #2 (Exhibit I, Tab 2, Schedule 1) and Board Staff Interrogatory #2 (Exhibit I, Tab 1, Schedule 2). No changes were made to the storage targets as a result of additional FT.

The reference to a fundamental change being referred to above is the commitment of the Company to mitigate relatively large budgeted levels of UDC. Because we were required to use best efforts to minimize UDC - when the plan called for additional purchases rather than purchase them at Dawn we used long haul until it was used up. This strategy resulted in minimal use of Dawn forward month purchases to maintain storage balances. However continuing deterioration in weather and the need to purchase daily supplies to supplement declining later season deliverability increased exposure to Dawn daily prices.

Witness: D. Small

FRPO INTERROGATORY #8

INTERROGATORY

**Reference: EB-2014-0191 Exhibit Q4-2 Tab 1 Schedule 1 Page 6**

Preamble: Paragraph 13 on the above referenced page outlines a process of determining the amount and type of additional gas purchases made by EGD throughout the winter

Please provide a table that provides the details of the additional purchases that includes:

- a) Date purchased
- b) Type of purchase (e.g., FT fill, spot gas purchase, Rest of Month)
- c) Delivery point
- d) Delivery dates
- e) Cost of gas

RESPONSE

Please see the response to Board Staff Interrogatory #2 (Exhibit I, Tab 1, Schedule 2).

FRPO INTERROGATORY #9

INTERROGATORY

Reference: EB-2014-0191 Exhibit Q4-3 Tab 4 Schedule 1 Page 1

Please describe the methodology change (Current vs. Proposed) referred to in the title of this table.

- a) When was this methodology change approved or is EGD seeking a change in this proceeding?

RESPONSE

The referenced table compares revenues at existing rates to revenues at proposed rates and the resulting revenue deficiency/sufficiency by rate class. The revenue at existing rates is considered the existing methodology. The revenue at proposed rates is considered the proposed methodology (i.e., proposed revenues). There is no change to the Board-Approved rate design methodology.

CME INTERROGATORY #1

INTERROGATORY

The unit commodity cost of gas, including PGVA clearances, which EGD asked the Board to approve for recovery in rates in its last QRAM proceeding before the Board subsequently imposed the mitigation measures.

RESPONSE

During the April QRAM process (including the QRAM review process) EGD went to considerable lengths to help stakeholders understand that Union has a significantly different and more conservative supply plan than EGD and as a result direct comparison of the outcomes of each utility following their approved supply plans were not appropriate. In its decision on March 31, 2014 the Board acknowledged those differences and acknowledged that EGD followed its approved gas supply plan to meet this winter's demand. We therefore believe that the comparisons suggested by CME are inappropriate and not helpful to the current QRAM process. Further, the Board has stated that the Natural Gas Market Review would "include an examination of underlying drivers of the QRAM, including the cost and risk trade-offs of different gas supply planning parameters" in its Amended Notice of Proceeding and Procedural Order No. 1 Review of the Quarterly Rate Adjustment Mechanism Process for Natural Gas Distributors which was issued on June 5, 2014. EGD believes this is the forum where parties will be able to probe deeper into the differences in the two supply plans and to better understand how outcomes of this winter may have been different with an alternative supply plan and what steps may be taken going forward.

CME INTERROGATORY #2

INTERROGATORY

The unit commodity cost of gas, including all PGVA clearances, which EGD is asking the Board to approve for recovery in rates in this QRAM proceeding.

RESPONSE

Please see the response to CME Interrogatory #1 (Exhibit I, Tab 3, Schedule 1).

CME INTERROGATORY #3

INTERROGATORY

The unit commodity cost of gas, including all PGVA clearances, included in Union's previous QRAM proceeding for recovery in its rates in the southern operations area.

RESPONSE

Please see the response to CME Interrogatory #1 (Exhibit I, Tab 3, Schedule 1).

CME INTERROGATORY #4

INTERROGATORY

The unit commodity cost of gas, including all PGVA clearances, which Union is asking the Board to approve in its current QRAM proceeding for recovery in its rates in the southern operations area.

RESPONSE

Please see the response to CME Interrogatory #1 (Exhibit I, Tab 3, Schedule 1).