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May 11, 2012

VIA RESS, EMAIL and COURIER

Ms Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, Suite 2700
Toronto, Ontario, M4P 1E4

Dear Ms Walli:

**Re: Enbridge Gas Distribution Inc. ("Enbridge") - Undertaking Responses
Renewable Natural Gas Program Application ("Application")
Ontario Energy Board ("Board") File Number EB-2011-0242 / EB-2011-0283**

During the Renewable Natural Gas Hearing, from April 30, 2012 to May 4, 2012, Enbridge and Union Gas Limited ("Union") agreed to file responses to the Undertakings.

Enclosed please find Undertaking Responses to: J3.1 and J4.11.

Also enclosed is an update to Undertaking Response J2.6 and J3.2. No change was made to the response for Undertaking J3.2; the table has simply been enlarged for ease of reading.

This submission has been filed through the Board's Regulatory Electronic Submission System ("RESS"), and two hard copies are being sent to the Board as directed. Enbridge's filing for this proceeding can be found on the Enbridge website at: www.enbridgegas.com/ratecase.

If you have any questions, please contact the undersigned.

Sincerely,

[Original signed by]

Lesley Austin
Regulatory Coordinator, Regulatory Affairs

cc: Mr. F. Cass, Aird & Berlis LLP (via email and courier)
All Interested Parties EB-2011-0242 (via email)

UNDERTAKING J3.1

Undertaking of Enbridge Gas Distribution Inc. and Union Gas Limited

Transcript Volume 4, page 136 and amended page 161.

To provide the Companies' positions with respect to the potential program amendments suggested by Mr. Warren. Amended as described.

In the final days of the hearing the Utilities gave an undertaking to consider certain Intervenor's suggested alterations to the RNG program proposed by the Utilities. Some of the concepts had already been carefully considered by the Utilities, as explained in the answer to Board Staff Interrogatory # 5 (Exhibit I-1-5). The Utilities have nonetheless reconsidered them, as detailed in the answers below.

While it continues to be the position of the utilities that the applications should be approved as filed, the Utilities are amenable to certain alterations to the RNG program, provided that those alterations do not fundamentally compromise the design and integrity of the program. As detailed below, some of the Intervenor's proposed alterations to the program would fundamentally compromise the design and integrity of the program and consequently should not be adopted. The implications for the program of such alterations would be wide-ranging, but have only been identified at a high level.

The amendments are listed below with transcript reference to the question and the response of the utilities to each one.

1) Question by Mr. Warren

"In the category of possible modifications to your proposal, would you consider building into the contracts an automatic annual reduction in the contracts to account for efficiencies that may have been achieved?"

[Transcript Volume 4, May3, p.129 line 26 to p. 130 line 2]

Response

No, the Utilities would not consider an automatic annual price reduction in the contracts. Most of the producer's costs consist of the initial sunken capital costs which do not change over time. The Utilities' proposal accounts for operating efficiencies through the CPI factor of 30%.

Specifically, while operating costs will go up for producers on an annual basis, the program will assume that 70% of CPI will be absorbed by producers through gains in efficiencies. In addition, the initial price was arrived at using the target of 11% discounted cash flow return on equity (ROE) and the revenue stream. Changing the revenue stream would result in either less than 11% threshold ROE or requires a higher initial price.

2) Questions from Mr. Warren

“And one of the propositions I put to you is a modification to your program would be a trial period in which you seek bids from, in effect, an RFP process from representatives of the nine scenarios that you've got, so that you can return to the Board with an actual set of data as to what the market is likely to look like in terms of people out there actually willing to engage in this. That's one proposition, whether you would be willing to do that. A second proposition would be whether or not you would be willing to include in this mechanism some sort of competitive bidding process.”

[Transcript Reference –Volume 4 Page 135 Line 16 to Page 136 Line 5]

Response

As indicated at Board Staff Interrogatory #5 (Exhibit I-1-5) and Bullfrog Interrogatory #6 (Exhibit I-4-6), a Request for Proposal (RFP) process includes the following drawbacks:

- The need for multiple RFPs,
- the rigidity of timing and structure of RFPs may discourage full participation from different sectors,
- the need to pre-evaluate distribution systems for connectivity,
- the costs of these processes for both the proponents and the utilities, and
- the experience of OPA's RFPs and standard offer programs.

The Utilities believe that an RFP process could possibly be established for those RNG production scenarios where potential benefits may outweigh the drawbacks. This could most appropriately apply to the Landfill sector which tends to have:

- large sophisticated proponents ,
- Identifiable market participants,
- Limited scope of technology development required (i.e. clean up only)

If this approach were to be taken, and multiple bids were received, the lowest cost landfill sourced supply would be accepted provided it was lower than or equal to that proposed by the

Utilities In this application. Regardless of the approach taken, the principles that form the basis for this application, such as bill impact mitigation and program manageability should remain intact.

3) Question by Mr. Warren

“A third suggestion that has been made is whether or not—is this question of a periodic review. And assuming that the program is approved in some form, would you agree to a two-year review process after you have—because you’ve said it is one year to 18 months to get the process going—if you would agree to a review at the end of the two years to provide, in effect, an interim report to the Board on the status of market development, before the Board gives its final approval to this.”

[Transcript Volume 4, May 3, p. 136, lines 6 to 14]

Response

The Utilities are prepared to annually report on the status of the RNG program as approved, in a public document to be forwarded to the Board. Should the Board determine that a more formal review process for the program is necessary; the structure of this review will be established by the Board. At a high level, the Utilities propose that the scope of any review should be:

- Completed on a prospective basis whereby contracts entered into prior to the review are considered valid (providing price certainty for producers) and approval of utility cost recovery associated with these contracts is not subject to retroactive adjustment by the Board.
- In the form of a written report filed with the Board to identify contracts signed and total volumes contracted for, as well as update on status of environmental attributes.
- No sooner than approximately half-way through the five year program period to allow adequate time for the program to get underway and projects to be implemented.
- Limited to changes to the volume cap and/or price model on a going-forward basis for the remaining period the program.

4) Question by Mr. Poch

Regarding filtering of projects based on GHG reduction costs (see transcript reference)

[See Transcript Volume 4, May 3, p.137 line 5 to p.139 line 8 for description of request]

Response

No, the Utilities do not agree with the concept of filtering projects by “implied” GHG reductions costs. The RNG program has benefits other than GHG reduction and there are no GHG protocols established in Ontario at this time. Therefore, a filter on “implied” rather than “actual” values is not workable. However, as the Utilities have said in evidence, the purpose of the program is to create a foundation for an RNG market over the next five years. During that time, the Ontario government may establish GHG reduction protocols. This and the learnings from the RNG program can provide a valuable basis where the “actual” (rather than “implied”) value of environmental attributes will help determine the overall value of new projects.

5) Question by Mr. Thompson

Part i:

Why couldn't you ask each producer to provide you with a price that's either market or 11 percent return on that particular producer's investment, whichever is the greater, and you could then look at that?.....And so I am really asking you, if the Board agrees with that, is there a response that you can provide to that by administering this on a project-by-project basis, or is that a non-starter?

[Transcript Volume 4, May 3, p. 160 (starting at line 14) to p. 161 (ending at line 15)]

Part ii:

If this was being administered on a supplier-specific basis, is another option -- and you can add this to the undertakings -- to merely lower the price, contractual price, by the value of the attributes?

[Transcript Volume 4, May 3, p. 171 (starting at line 22) to p. 172 (ending at line 8)]

Response

- i. The Utilities do not propose to evaluate the return on investment on a project-by-project basis for the RNG program. Per the evidence filed, the utilities have proposed a transparent RNG pricing mechanism for AD and landfill projects to achieve an approximate 11% ROE over a 20-year contract life. The greater the RNG supply volume of a project above its respective annual breakpoint, the lower the average RNG price that project will receive. The pricing mechanism is intended to reflect economies of scale that

are anticipated for the development of larger projects, thereby limiting the possibility of higher than appropriate returns.

It would be challenging to obtain and verify from individual proponents all the input data, costs, cost allocations, pricing and escalation measures necessary to ascertain if a return is appropriate.

- ii. Likewise, the Utilities do not propose to lower contracted prices for RNG for the potential value of environmental attributes. As outlined in response to Mr. Poch's request (#4 above) there are no protocols established at this time. The environmental attributes, as outlined in evidence and testimony, will be acquired by the Utilities on behalf of system supply customers. In the future event that those acquired attributes have a defined monetary value, the Utilities propose to administer the savings to system supply customers.

6) Question by Mr. Thompson

"Would you have any -- if the market price was sufficient to generate 11 percent return, would you have any objection to the contract automatically terminating and the RNG seller just taking market price?"

[Transcript Volume 4, May 3, p. 169 (lines 5 to 8)]

Response

No, the Utilities do not propose to automatically terminate RNG purchase agreements upon the future market price of natural gas being sufficient for proponents to generate an 11% return. The Utilities' proposed RNG program reflects an approximate 11% ROE for a variety of RNG developments, which is directly correlated to fixed price certainty for the RNG being generated and sold to the utilities, (per response by Mr. Schneider of Enbridge Gas Distribution: Transcript Volume 4, May 3, p. 145, lines 2 through 15). In the event that the RNG program pricing established for the contracts becomes lower than future natural gas market prices, RNG will represent a discounted source of supply, a benefit to the system customers who are paying for the program.

UNDERTAKING J4.11

Undertaking of Enbridge Gas Distribution Inc. and Union Gas Limited

Transcript Volume 5, page 125.

To advise, assuming a total bill impact of 1.81 for all distribution customers, approximately how many additional PJs the Companies could produce.

Enbridge response:

For the purpose of this undertaking response, Enbridge assumed that the costs of RNG supplies would be paid for by all customers through their delivery rates and the costs would be allocated volumetrically based on delivery volumes to the customer rate classes. Allocating the costs based on delivery volumes results in all customers paying the same unit rate. Based on the Company's July 1, 2011 QRAM (EB-2011-0129), the incremental costs of RNG purchases is forecast to be approximately \$34.4 million. The impact on system gas and direct purchase residential customers from recovering this cost in their delivery rates would be approximately \$9.00 annually.

If all system gas and direct purchase residential customers were required to pay \$18 annually for RNG purchases, the total volume cap would increase to 169,500 10^3m^3 and the incremental cost of RNG supply would be approximately \$66.7 million.

Union response:

For the purposes of this undertaking response, Union has assumed that all Rate M1 and Rate 01 customers are sales service customers. Union has assumed no change to sales service volumes in other rate classes.

Based on Union South sales service volumes of 99.8 PJ and an approximate annual bill impact of \$18 for an average residential customer, Union's proposed annual RNG volume cap is 1.7 PJ. Assuming all Rate M1 customers are sales service customers, approximately 0.4 to 0.5 PJ of additional RNG could be purchased.

Based on Union North sales service volumes of 824,123 10^3m^3 and an approximate annual bill impact of \$18 for an average residential customer, Union's proposed annual RNG volume cap is 0.5 PJ. Assuming all Rate 01 customers are sales service customers, approximately 0.1 to 0.2 PJ of additional RNG could be purchased.

UNDERTAKING J2.6

Undertaking of Enbridge Gas Distribution Inc. and Union Gas Limited

Transcript Volume 3, page 108.

To advise on cross-tab responses between concern over environment and willingness to support renewable gas program; and percentage increase supported with steps already taken to save energy.

Part a)

Eighty-five percent of respondents indicate that they are concerned (very or somewhat) about the current state of the environment. The sample size of the sub-group of respondents who say they are not at all concerned about the current state of the environment is too small to draw conclusions when comparing to other segments. The general conclusion is that those who are concerned about the environment are more supportive of premiums than those who are not very concerned.

The tables are shown below.

Using the table below as an example - Respondents who are very concerned (column A) are more supportive of premiums than respondents who are somewhat concerned (column B) and not very concerned (column C) about the environment. Respondents who are somewhat concerned (column B) are more supportive of premiums than respondents who are not very concerned (column C) about the environment.

Q10. If your utility purchased biogas and the result was that your gas utility bill increased by 4% — which is about \$3.00 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

Q1. Overall, how concerned are you about the current state of the environment?						
	Total	Very concerned	Somewhat concerned	Not very concerned	Not at all concerned	Don't know/ Refused
		A	B	C	D	E
Base: All respondents	1052	377	514	125	28**	8**
Strongly support	172	88	70	11	2	1
	16.3%	23.3%	13.6%	8.8%	7.1%	12.5%
		BC				
Somewhat support	432	162	225	40	4	1
	41.1%	43.0%	43.8%	32.0%	14.3%	12.5%
		C	C			
Somewhat oppose	211	62	110	35	3	1
	20.1%	16.4%	21.4%	28.0%	10.7%	12.5%
				A		
Strongly oppose	165	39	72	33	18	3
	15.7%	10.3%	14.0%	26.4%	64.3%	37.5%
				AB		
Don't Know	72	26	37	6	1	2
	6.8%	6.9%	7.2%	4.8%	3.6%	25.0%
Summary						
Top2Box (Strongly/ Somewhat support)	604	250	295	51	6	2
	57.4%	66.3%	57.4%	40.8%	21.4%	25.0%
		BC	C			
Low2Box (Somewhat/ Strongly oppose)	376	101	182	68	21	4
	35.7%	26.8%	35.4%	54.4%	75.0%	50.0%
			A	AB		

* small base; ** very small base (under 30)

Q11. If your utility purchased biogas and the result was that your gas utility bill increased by 2% — which is about \$1.50 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

Q1. Overall, how concerned are you about the current state of the environment?						
	Total	Very concerned	Somewhat concerned	Not very concerned	Not at all concerned	Don't know/ Refused
		A	B	C	D	E
Base: All respondents	1052	377	514	125	28**	8**
Strongly support	352	159	170	21	1	1
	33.5%	42.2%	33.1%	16.8%	3.6%	12.5%
		BC	C			
Somewhat support	353	130	177	39	5	2
	33.6%	34.5%	34.4%	31.2%	17.9%	25.0%
Somewhat oppose	178	51	89	33	4	1
	16.9%	13.5%	17.3%	26.4%	14.3%	12.5%
				AB		
Strongly oppose	124	23	55	27	16	3
	11.8%	6.1%	10.7%	21.6%	57.1%	37.5%
			A	AB		
Don't Know	45	14	23	5	2	1
	4.3%	3.7%	4.5%	4.0%	7.1%	12.5%
Summary						
Top2Box (Strongly/ Somewhat support)	705	289	347	60	6	3
	67.0%	76.7%	67.5%	48.0%	21.4%	37.5%
		BC	C			
Low2Box (Somewhat/ Strongly oppose)	302	74	144	60	20	4
	28.7%	19.6%	28.0%	48.0%	71.4%	50.0%
			A	AB		

* small base; ** very small base (under 30)

Q12. If your utility purchased biogas and the result was that your gas utility bill increased by 1% — which is about \$0.80 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

Q1. Overall, how concerned are you about the current state of the environment?						
	Total	Very concerned	Somewhat concerned	Not very concerned	Not at all concerned	Don't know / Refused
		A	B	C	D	E
Base: All respondents	1052	377	514	125	28**	8**
Strongly support	492	210	248	31	2	1
	46.8%	55.7%	48.2%	24.8%	7.1%	12.5%
		BC	C			
Somewhat support	283	101	133	41	6	2
	26.9%	26.8%	25.9%	32.8%	21.4%	25.0%
Somewhat oppose	125	31	66	24	3	1
	11.9%	8.2%	12.8%	19.2%	10.7%	12.5%
			A	A		
Strongly oppose	107	21	43	24	16	3
	10.2%	5.6%	8.4%	19.2%	57.1%	37.5%
				AB		
Don't Know	45	14	24	5	1	1
	4.3%	3.7%	4.7%	4.0%	3.6%	12.5%
Summary						
Top2Box (Strongly/ Somewhat support)	775	311	381	72	8	3
	73.7%	82.5%	74.1%	57.6%	28.6%	37.5%
		BC	C			
Low2Box (Somewhat/ Strongly oppose)	232	52	109	48	19	4
	22.1%	13.8%	21.2%	38.4%	67.9%	50.0%
			A	AB		

* small base; ** very small base (under 30)

Q13. If your utility purchased biogas and the result was that your gas utility bill increased by ½% — which is about \$0.40 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

Q1. Overall, how concerned are you about the current state of the environment?						
	Total	Very concerned	Somewhat concerned	Not very concerned	Not at all concerned	Don't know / Refused
		A	B	C	D	E
Base: All respondents	1052	377	514	125	28**	8**
Strongly support	562	232	278	47	4	1
	53.4%	61.5%	54.1%	37.6%	14.3%	12.5%
		BC	C			
Somewhat support	239	87	115	29	7	1
	22.7%	23.1%	22.4%	23.2%	25.0%	12.5%
Somewhat oppose	100	25	54	20	0	1
	9.5%	6.6%	10.5%	16.0%	-	12.5%
			A	A		
Strongly oppose	106	21	41	25	16	3
	10.1%	5.6%	8.0%	20.0%	57.1%	37.5%
				AB		
Don't Know	45	12	26	4	1	2
	4.3%	3.2%	5.1%	3.2%	3.6%	25.0%
Summary						
Top2Box (Strongly/ Somewhat support)	801	319	393	76	11	2
	76.1%	84.6%	76.5%	60.8%	39.3%	25.0%
		BC	C			
Low2Box (Somewhat/ Strongly oppose)	206	46	95	45	16	4
	19.6%	12.2%	18.5%	36.0%	57.1%	50.0%
			A	AB		

* small base; ** very small base (under 30)

Cross-tab on part a) was run as a response to this undertaking.

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Part b)

Since 97% of respondents report having taken steps to save energy at home, the sample size of the sub-group of respondents that has not taken steps is too small to draw conclusions between the customers who have and have not done something to save energy.

Q10. If your utility purchased biogas and the result was that your gas utility bill increased by 4% — which is about \$3.00 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

	Save Energy			
	Total	Yes	No	Don't know /Refused
Base: All respondents	1052	V 1025	W 22**	X 5**
Strongly support	172	172	0	0
	16.3%	16.8%	-	-
Somewhat support	432	425	5	2
	41.1%	41.5%	22.7%	40.0%
Somewhat oppose	211	203	6	2
	20.1%	19.8%	27.3%	40.0%
Strongly oppose	165	155	9	1
	15.7%	15.1%	40.9%	20.0%
Don't Know	72	70	2	0
	6.8%	6.8%	9.1%	-
Summary				
Top2Box (Strongly/ Somewhat support)	604	597	5	2
	57.4%	58.2%	22.7%	40.0%
Low2Box (Somewhat/ Strongly oppose)	376	358	15	3
	35.7%	34.9%	68.2%	60.0%

* small base; ** very small base (under 30)

Q11. If your utility purchased biogas and the result was that your gas utility bill increased by 2% — which is about \$1.50 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

Save Energy				
	Total	Yes	No	Don't know /Refused
		V	W	X
Base: All respondents	1052	1025	22**	5**
Strongly support	352	348	4	0
	33.5%	34.0%	18.2%	-
Somewhat support	353	347	2	4
	33.6%	33.9%	9.1%	80.0%
Somewhat oppose	178	171	7	0
	16.9%	16.7%	31.8%	-
Strongly oppose	124	116	7	1
	11.8%	11.3%	31.8%	20.0%
Don't Know	45	43	2	0
	4.3%	4.2%	9.1%	-
Summary				
Top2Box (Strongly/ Somewhat support)	705	695	6	4
	67.0%	67.8%	27.3%	80.0%
Low2Box (Somewhat/ Strongly oppose)	302	287	14	1
	28.7%	28.0%	63.6%	20.0%

* small base; ** very small base (under 30)

Q12. If your utility purchased biogas and the result was that your gas utility bill increased by 1% — which is about \$0.80 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

Save Energy				
	Total	Yes	No	Don't know / Refused
Base: All respondents	1052	V 1025	W 22**	X 5**
Strongly support	492	486	4	2
	46.8%	47.4%	18.2%	40.0%
Somewhat support	283	275	6	2
	26.9%	26.8%	27.3%	40.0%
Somewhat oppose	125	121	4	0
	11.9%	11.8%	18.2%	-
Strongly oppose	107	99	7	1
	10.2%	9.7%	31.8%	20.0%
Don't Know	45	44	1	0
	4.3%	4.3%	4.5%	-
Summary				
Top2Box (Strongly/ Somewhat support)	775	761	10	4
	73.7%	74.2%	45.5%	80.0%
Low2Box (Somewhat/ Strongly oppose)	232	220	11	1
	22.1%	21.5%	50.0%	20.0%

* small base; ** very small base (under 30)

Q13. If your utility purchased biogas and the result was that your gas utility bill increased by ½% —which is about \$0.40 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

	Save Energy			
	Total	Yes	No	Don't know /Refused
Base: All respondents	1052	V 1025	W 22**	X 5**
Strongly support	562	553	6	3
	53.4%	54.0%	27.3%	60.0%
Somewhat support	239	230	8	1
	22.7%	22.4%	36.4%	20.0%
Somewhat oppose	100	99	1	0
	9.5%	9.7%	4.5%	-
Strongly oppose	106	98	7	1
	10.1%	9.6%	31.8%	20.0%
Don't Know	45	45	0	0
	4.3%	4.4%	-	-
Summary				
Top2Box (Strongly/ Somewhat support)	801	783	14	4
	76.1%	76.4%	63.6%	80.0%
Low2Box (Somewhat/ Strongly oppose)	206	197	8	1
	19.6%	19.2%	36.4%	20.0%

* small base; ** very small base (under 30)

Cross-tab on part b) was run as part of the study.

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UNDERTAKING J3.2

Undertaking of Enbridge Gas Distribution Inc. and Union Gas Limited

Transcript Volume 4, page 159.

To provide pricing for small, medium and large landfill.

The landfill sizes used in the Electrigaz reports do not correspond directly to those used by the Ontario Ministry of the Environment ("MOE"). MOE designates *large landfills* as those with total waste disposal capacities of 1.5 million cubic metres of material or greater. Therefore the MOE listing of large landfills found at Exhibit B, Tab 1, Appendix 2, Table 8, pages 18 and 19, includes *large, medium and small* sized example landfills as provided in the Electrigaz Reports.

The Electrigaz Costing report at Exhibit B, Tab 1, Appendix 4 at page 10 defines small, medium and large landfills by the first year RNG volumes to be injected into the distribution grid. The annual volumes of RNG produced increase in each year as more material enters the landfill.

- **Small landfill:** 243 m³/hr
- **Medium landfill:** 569 m³/hr
- **Large landfill:** 1,896 m³/hr

The attached chart shows the average pricing paid in each year for RNG produced by the three representative examples of landfills used in the Electrigaz Reports found at Exhibit B, Tab 1, Appendix 4 and 5, small, medium and large.

The average price paid is calculated as the amount of RNG under the 150,000GJ annual breakpoint (threshold) multiplied by \$13/GJ, and the amount over the 150,000GJ annual breakpoint multiplied by \$6/GJ. The total dollar value paid is then divided by the total volume received to calculate an average price paid.

For calculation of average prices for subsequent years, the \$13 and \$6 program prices are increased annually 30% of the Ontario CPI (inflation index) and the volumes produced by the landfill increase each year. This is representative of the additional gas produced by each year's landfill activity. It should be noted in year 13 of the large landfill project, new capital equipment is added, which increases the effective salable output of the project, which explains the drop in the average price received.

Year	1	2	3	4	5	6	7	8	9
Small LFG (Annual GJ)									
Below threshold									
GJ below threshold	80 939	83 204	85 368	87 438	89 416	91 308	93 116	94 845	96 497
Price below threshold	\$ 13.00	\$ 13.09	\$ 13.18	\$ 13.27	\$ 13.35	\$ 13.44	\$ 13.54	\$ 13.63	\$ 13.72
Cost below threshold	\$ 1 052 209	\$ 1 088 947	\$ 1 124 821	\$ 1 159 866	\$ 1 194 117	\$ 1 227 607	\$ 1 260 368	\$ 1 292 431	\$ 1 323 826
Above threshold									
GJ above threshold	-	-	-	-	-	-	-	-	-
Price above threshold	\$ 6.00	\$ 6.04	\$ 6.08	\$ 6.12	\$ 6.16	\$ 6.21	\$ 6.25	\$ 6.29	\$ 6.33
Cost above threshold	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total cost	\$ 1 052 209	\$ 1 088 947	\$ 1 124 821	\$ 1 159 866	\$ 1 194 117	\$ 1 227 607	\$ 1 260 368	\$ 1 292 431	\$ 1 323 826
Average price	\$ 13.00	\$ 13.09	\$ 13.18	\$ 13.27	\$ 13.35	\$ 13.44	\$ 13.54	\$ 13.63	\$ 13.72
Med LFG (Annual GJ)									
Below threshold									
GJ below threshold	188 858	194 142	199 193	204 022	208 638	213 051	217 271	221 304	225 160
Price below threshold	\$ 150 000	\$ 150 000	\$ 150 000	\$ 150 000	\$ 150 000	\$ 150 000	\$ 150 000	\$ 150 000	\$ 150 000
Cost below threshold	\$ 13.00	\$ 13.09	\$ 13.18	\$ 13.27	\$ 13.35	\$ 13.44	\$ 13.54	\$ 13.63	\$ 13.72
Above threshold									
GJ above threshold	38 858	44 142	49 193	54 022	58 638	63 051	67 271	71 304	75 160
Price above threshold	\$ 6.00	\$ 6.04	\$ 6.08	\$ 6.12	\$ 6.16	\$ 6.21	\$ 6.25	\$ 6.29	\$ 6.33
Cost above threshold	\$ 233 148	\$ 266 638	\$ 299 155	\$ 330 738	\$ 361 425	\$ 391 250	\$ 420 248	\$ 448 453	\$ 475 895
Total cost	\$ 2 183 148	\$ 2 229 800	\$ 2 275 569	\$ 2 320 493	\$ 2 364 610	\$ 2 407 957	\$ 2 450 568	\$ 2 492 477	\$ 2 533 716
Average price	\$ 11.56	\$ 11.49	\$ 11.42	\$ 11.37	\$ 11.33	\$ 11.30	\$ 11.28	\$ 11.26	\$ 11.25
Large LFG (Annual GJ)									
Below threshold									
GJ below threshold	635 156	652 926	652 926	652 926	652 926	652 926	652 926	652 926	652 926
Price below threshold	\$ 150 000	\$ 150 000	\$ 150 000	\$ 150 000	\$ 150 000	\$ 150 000	\$ 150 000	\$ 150 000	\$ 150 000
Cost below threshold	\$ 13.00	\$ 13.09	\$ 13.18	\$ 13.27	\$ 13.35	\$ 13.44	\$ 13.54	\$ 13.63	\$ 13.72
Above threshold									
GJ above threshold	485 156	502 926	502 926	502 926	502 926	502 926	502 926	502 926	502 926
Price above threshold	\$ 6.00	\$ 6.04	\$ 6.08	\$ 6.12	\$ 6.16	\$ 6.21	\$ 6.25	\$ 6.29	\$ 6.33
Cost above threshold	\$ 2 910 938	\$ 3 037 925	\$ 3 058 431	\$ 3 079 076	\$ 3 099 859	\$ 3 120 784	\$ 3 141 849	\$ 3 163 056	\$ 3 184 407
Total cost	\$ 4 860 938	\$ 5 001 088	\$ 5 034 845	\$ 5 068 830	\$ 5 103 045	\$ 5 137 490	\$ 5 172 169	\$ 5 207 081	\$ 5 242 228
Average price	\$ 7.65	\$ 7.66	\$ 7.71	\$ 7.76	\$ 7.82	\$ 7.87	\$ 7.92	\$ 7.97	\$ 8.03

10	11	12	13	14	15	16	17	18	19	20
98 077	99 587	101 031	102 411	103 731	104 993	106 199	107 352	108 454	109 507	110 515
98 077	99 587	101 031	102 411	103 731	104 993	106 199	107 352	108 454	109 507	110 515
\$ 13.81	\$ 13.90	\$ 14.00	\$ 14.09	\$ 14.19	\$ 14.28	\$ 14.38	\$ 14.48	\$ 14.58	\$ 14.67	\$ 14.77
\$ 1 354 581	\$ 1 384 725	\$ 1 414 284	\$ 1 443 284	\$ 1 471 748	\$ 1 499 702	\$ 1 527 168	\$ 1 554 168	\$ 1 580 723	\$ 1 606 855	\$ 1 632 582
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 6.37	\$ 6.42	\$ 6.46	\$ 6.50	\$ 6.55	\$ 6.59	\$ 6.64	\$ 6.68	\$ 6.73	\$ 6.77	\$ 6.82
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 1 354 581	\$ 1 384 725	\$ 1 414 284	\$ 1 443 284	\$ 1 471 748	\$ 1 499 702	\$ 1 527 168	\$ 1 554 168	\$ 1 580 723	\$ 1 606 855	\$ 1 632 582
\$ 13.81	\$ 13.90	\$ 14.00	\$ 14.09	\$ 14.19	\$ 14.28	\$ 14.38	\$ 14.48	\$ 14.58	\$ 14.67	\$ 14.77
228 846	232 370	235 739	238 960	242 039	244 983	247 797	250 487	253 059	255 517	257 868
150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000
\$ 13.81	\$ 13.90	\$ 14.00	\$ 14.09	\$ 14.19	\$ 14.28	\$ 14.38	\$ 14.48	\$ 14.58	\$ 14.67	\$ 14.77
\$ 2 071 712	\$ 2 085 696	\$ 2 099 774	\$ 2 113 948	\$ 2 128 217	\$ 2 142 582	\$ 2 157 045	\$ 2 171 605	\$ 2 186 263	\$ 2 201 021	\$ 2 215 877
78 846	82 370	85 739	88 960	92 039	94 983	97 797	100 487	103 059	105 517	107 868
\$ 6.37	\$ 6.42	\$ 6.46	\$ 6.50	\$ 6.55	\$ 6.59	\$ 6.64	\$ 6.68	\$ 6.73	\$ 6.77	\$ 6.82
\$ 502 605	\$ 528 614	\$ 553 949	\$ 578 637	\$ 602 706	\$ 626 180	\$ 649 083	\$ 671 440	\$ 693 273	\$ 714 604	\$ 735 453
\$ 2 574 317	\$ 2 614 310	\$ 2 653 723	\$ 2 692 585	\$ 2 730 923	\$ 2 768 762	\$ 2 806 128	\$ 2 843 045	\$ 2 879 536	\$ 2 915 624	\$ 2 951 330
\$ 11.25	\$ 11.25	\$ 11.26	\$ 11.27	\$ 11.28	\$ 11.30	\$ 11.32	\$ 11.35	\$ 11.38	\$ 11.41	\$ 11.45
652 926	652 926	652 926	803 657	814 012	823 912	833 376	842 424	851 073	859 342	867 247
150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000
\$ 13.81	\$ 13.90	\$ 14.00	\$ 14.09	\$ 14.19	\$ 14.28	\$ 14.38	\$ 14.48	\$ 14.58	\$ 14.67	\$ 14.77
\$ 2 071 712	\$ 2 085 696	\$ 2 099 774	\$ 2 113 948	\$ 2 128 217	\$ 2 142 582	\$ 2 157 045	\$ 2 171 605	\$ 2 186 263	\$ 2 201 021	\$ 2 215 877
502 926	502 926	502 926	653 657	664 012	673 912	683 376	692 424	701 073	709 342	717 247
\$ 6.37	\$ 6.42	\$ 6.46	\$ 6.50	\$ 6.55	\$ 6.59	\$ 6.64	\$ 6.68	\$ 6.73	\$ 6.77	\$ 6.82
\$ 3 205 902	\$ 3 227 541	\$ 3 249 327	\$ 4 251 683	\$ 4 348 192	\$ 4 442 806	\$ 4 535 608	\$ 4 626 678	\$ 4 716 093	\$ 4 803 926	\$ 4 890 250
\$ 5 277 614	\$ 5 313 237	\$ 5 349 102	\$ 6 365 631	\$ 6 476 409	\$ 6 585 389	\$ 6 692 653	\$ 6 798 283	\$ 6 902 356	\$ 7 004 947	\$ 7 106 127
\$ 8.08	\$ 8.14	\$ 8.19	\$ 7.92	\$ 7.96	\$ 7.99	\$ 8.03	\$ 8.07	\$ 8.11	\$ 8.15	\$ 8.19