RESPONSE OF GAZ MÉTRO LIMITED PARTNERSHIP (GAZ MÉTRO) TO THE REQUEST FOR INFORMATION NO. 1 OF OPTION CONSOMMATEURS (OC) PRESENTED TO GAZ MÉTRO LIMITED PARTNERSHIP (GM)

APPLICATION REGARDING THE GENERIC MATTER RELATING TO THE ALLOCATION OF COSTS AND GAZ MÉTRO'S RATE STRUCTURE

R-3867-2013 PHASE 3B

GAZ METRO'S PROFITABILITY ANALYSES FOR SYSTEM EXPANSION PROJECTS

1. Reference: i) Exhibit B-0178, GM-7, Doc 1.

Questions:

Regarding conceptualization of costs included in the profitability analysis:

1.1 Please identify any investments beyond the system itself, which are included as a cost of a system addition in Gaz Metro's profitability analyses.

Response:

The cost of a system addition, beyond the basic connection and service line costs, generally include the following investments:

- Contractor expenses (allocated costs);
- Union des municipalités expenses (which in some municipalities only need to be paid once);
- General corporate costs (allocated costs); and
- Cost of commercial programs (where applicable).

The project cost also takes into consideration any contribution made by the customer(s) and any external subsidy or contribution, where applicable.

1.2 Specifically identify the incremental amounts of new distribution capacity and transmission capacity away from the system addition that are included.

Response:

The economic analysis of a project is based on a technical study wherein the requisite distribution or transmission capacity of the service line (whichever applies) usually

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applied to the profitability analysis, R-3867-2013

corresponds to the anticipated needs of the customer(s). In some cases, the capacity of new service lines may exceed the immediate needs of new customers if Gaz Métro anticipates a future economic potential (ex.: industrial park, new neighbourhood, new municipality, etc.).

Moreover, Gaz Métro also considers investments made to reinforce distribution and transmission systems when applicable. As specified in Exhibit B-0196, Gaz Métro-7, Document 2, R-3987-2016, Gaz Métro provides a reinforcement budget for system developments in order to cover the costs associated with reinforcing the distribution system's capacity and to allow one or several customers to connect to the existing system. Investments made to reinforce the distribution system therefore seek to increase the distribution system's capacity and operational flexibility. The distribution system may need to be reinforced to serve new customers, potential future customers, or existing customers wanting to increase the volume of their current consumption.

Reinforcement could include, among other things, lining the service lines, looping or adjusting a compressor station.

Reinforcement costs are taken into account in the overall profitability of the development plan.

2. Reference: i) Exhibit B-0178, GM-7, Doc 1.

Questions:

Regarding incremental system costs which may affect profitability of system extensions and which may be part of long-run marginal costs:

2.1 Please provide the amount of new distribution main investment, by size and/or pressure level and material (plastic or steel), in km and dollars, installed from 2006-2015 recorded and 2016-2020 forecast. Divide mains into (a) those allowing the connection or conversion of a number of new customers (part or all of a system expansion); (b) those allowing the connection or conversion of individual new customers (individual infill within existing system); (c) those increasing in capacity or reliability for serving customers at points other than system expansions or new customer connections; and (d) other main investments.

Response:

Actual investments for new service lines (mains) from 2006 to 2016 and those forecast for 2017 to 2020 are presented in Schedule Q-2.1.

The data are broken down to reflect (a) developments that correspond to system expansions for new customers, and (c) reinforcements that correspond to an increase in the distribution system's capacity. As regards the existing system's service line (b), no investment is currently being made, as no service lines are being laid to connect customers to an existing system.

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As regards the 2017 to 2020 forecasts for the new service line, Gaz Métro is preparing a budget for all steel and plastic pipelines, regardless of their diameter, seeing as Gaz Métro does not have the details of each project when preparing budgets.

Note that the quantities of and investments in service lines carried out in the context of major projects have been excluded from the analysis, since major projects are not usually representative of Gaz Métro's recurrent activities.

2.2 Please provide the amount of new distribution measuring and regulating stations (number and dollars), installed from 2006-2015 recorded and 2016-2020 forecast.

Response:

Gaz Métro records meter costs globally, in other words for new installations and existing ones, and not separately. The following table indicates the costs of meters purchased (regardless of whether or not they have been installed) between 2006 and 2016 and the projected number of meters to be purchased between 2017 and 2020.

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	Fiscal Year	Amount	Quantity
		(\$)	
	2006	3,420,638	15,585
	2007	2,469,197	14,002
	2008	3,072,707	17,377
Actual	2009	2,708,584	17,322
	2010	2,517,169	12,644
	2011	5,057,573	19,595
	2012	3,495,466	16,564
	2013	4,218,832	19,105
	2014	5,788,916	26,922.1
	2015	4,814,973	14,875
	2016	5,405,337	20,002
	2017	5,350,000	19,553
Forecast	2018	7,699,743	21,410,1
	2019	7,815,239	21,410
	2020	7,845,653	21,410.1

Gaz Métro includes regulating costs in its connection costs. Regulating costs are not monitored separately.

2.3 Please provide the amount of distribution mains replacing existing mains, by size and/or pressure level and material (plastic or steel), in km and dollars, installed from 2006-2015 recorded and 2016-2020 forecast.

Response:

The actual investments made to replace service lines (mains) for 2006 to 2016 are presented in Schedule Q-2.3.

Gaz Métro is unable to provide information on the anticipated quantities and investments for replacing service lines from 2017 to 2020. The forecasts are not prepared based on quantities, and

there are no specific forecasts for service line replacement work.

Note that service line replacement quantities and investments made in the context of major projects have been excluded from the analysis, since major projects are not usually representative of Gaz Métro's recurrent activities.

2.4 Please provide the amount of distribution measuring and regulating stations replacing existing stations (number and dollars) installed from 2006-2015 recorded and 2016-2020 forecast.

Response:

Please see the response to question 2.2.

2.5 Please provide the amount of new transmission investment (including km of mains and dollars) installed from 2006-2015 recorded and 2016-2020 forecast. Divide investments into (a) those allowing the connection of new service regions and/or new very large customers; (b) those increasing in capacity or reliability for serving existing customers and regions.

Response:

No capital investment has been made in new transmission lines between 2006 and 2016, and no investment is currently anticipated for the new transmission lines between 2017 and 2020.

2.6 Please provide the average cost per meter of installing new distribution mains at each diameter up to 25 cm, and separately for steel and plastic mains, for any diameters where new steel mains are more than 5% of the meters of main installed of that diameter.

Response:

Project costs will vary depending on the environment, complexity, amount of work to be completed, diameter of the lines (mains) and materials used.

The attached table presents the average project cost broken down by region and by types of materials used in typical projects for diameters ranging between 5.08 and 15.24 cm. Given the great variability of completion conditions and the limited number of service line projects involving lines of over 15.24 cm, it is very difficult for Gaz Métro to provide average project costs that are representative. Such projects are analyzed on a case-by-case basis.

Cost of service lines for 50 lm and 300 lm projects*

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			estimates c lines ¹	Project e Steel	
Regions	Zone	50 lm	300 lm	50 lm	300 lm
Québec		\$11,203	\$45,181	\$15,877	\$51,063
Saguenay-Lac-St-Jean		\$10,262	\$41,646	\$15,794	\$50,885
Abitibi	East	\$11,865	\$39,485	\$14,886	\$48,722
Estrie		\$10,246	\$38,943	\$15,891	\$50,690
Mauricie		\$9,186	\$37,159	\$15,470	\$50,189
Montréal West		\$12,171	\$46,705	\$13,723	\$43,718
Montréal East	Wast	\$12,647	\$45,034	\$14,384	\$46,963
Laurentian Mountains	West	\$10,688	\$35,021	\$13,575	\$42,561
Montérégie		\$11,168	\$35,784	\$15,924	\$51,346

^{*}Linear metres.

SYSTEM LOADS AFFECTING LONG-RUN MARGINAL SYSTEM EXPANSION **COSTS**

3 Reference: i) Exhibit B-0178, GM-7, Doc 1.

Questions:

Regarding system loads that may affect long-run marginal system expansion costs:

3.1 Please identify the system planning capacity requirements (i.e., peak demand) for all customers (stating separately the peak demand for transmission and for distribution) by rate class in each year from 2006-2015 recorded and 2016-2020 forecast.

Response:

Transmission

The transmission systems' demand is monitored twice a year, and is calculated using the method developed by Artélys in 2014. The files illustrate the demand over a 10-year period.

The table below gives the peak hourly output for the transmission systems that are monitored annually using the method developed by Artélys.

Based on the average costs and assuming that the service line is installed under grass.
 Based on general contracts and assuming that the service line is installed under grass.

Peak hourly output (m³/hour)

Transmission system	2014	2015	2016	2017	2018	2019	2020
Saguenay (Saint-Maurice)	129,500	125,214	124,783	122,204	125,132	125,595	146,928
Abitibi (Rouyn)	28,740	31,494	31,218	31,211	34,597	36,199	39,967
Bécancour	26,360	29,297	29,041	31,215	145,926	145,883	145,839
Montérégie (Saint-Mathieu)	n/a	237,893	239,922	237,723	238,277	238,937	241,601
Estrie Waterloo/ Windsor	55,820	65,162	64,288	62,449	63,010	65,468	66,673
Estrie Sabrevois/Courval	89,450	94,858	94,148	99,713	104,653	106,862	108,252
Saint-Flavien/Saint-Nicolas	n/a.	3,290	3,398	3,349	3,369	3,389	3,709

Distribution

In the case of distribution systems, each of them are monitored monthly. Hydraulic models are updated using the monthly, daily or hourly customer invoicing data.

This information is not compiled by customer rates, seeing as this information is not relevant for monitoring purposes.

Rate

In the allocation of costs, Gaz Métro calculates each type of customer's relative capacity. However, this calculation is not used by Engineering for planning purposes. Before 2013, capacity wasn't calculated for interruptible customers. Gaz Métro was able to compile the capacities starting in 2008.

Capacity demand by rate/level (10³m³/year)										
Rate	Level	2008	2009	2010	2011	2013	2014			
D1	[0 - 365]	6,880	7,998	10,470	11,510	13,125	9,163			
D1	[365 - 1 095]	41,899	45,905	50,916	56,209	89,549	68,057			
D1	[1 095 - 3 650]	512,534	544,796	592,751	594,638	665,147	609,952			
D1	[3 650 - 10 950]	670,695	663,007	721,269	713,517	722,849	696,579			
D1	[10 950 - 36 500]	1,197,740	1,249,144	1,393,112	1,307,511	1,446,524	1,346,311			
D1	[36 500 - 109 500]	1,724,422	1,710,335	1,900,395	1,776,302	1,781,951	1,760,465			
D1	[109 500 - 365 000]	1,443,681	1,386,239	1,444,422	1,364,516	1,270,852	1,314,610			
D1	[365 000 - 1 095 000]	780,449	650,162	652,889	600,545	528,369	569,345			
D1	[1 095 000+]	286,770	231,710	224,034	243,239	288,059	305,680			
D1-RT		1,671,555	2,383,123	1,861,553	1,486,510	1,398,638	1,335,777			
D303		2,532	1,847	2,351	2,391	16,048	19,382			
D304		7,744	6,485	5,801	5,461	71,461	59,079			
D305		36,605	34,027	73,806	26,134	102,556	61,222			
D406		335,339	782,636	635,389	293,468	629,415	925,590			
D407		631,460	849,755	452,493	539,324	1,242,260	1,550,888			
D408		585,456	661,380	1,016,160	663,906	767,791	1,695,936			
D409		194,443	105,120	262,800	201,775	1,091,854	1,405,244			
D410		955,373	1,112,520	133,711	69,533	1,112,520	1,769,520			
D505		0	0	0	0	470,815	602,968			
D506		0	0	0	0	249,740	216,503			
D507		0	0	0	0	396,165	306,162			
D508		0	0	0	0	342,558	254,040			
D509		0	0	0	0	238,494	310,244			
D535		0	0	0	0	122,284	170,619			
D536		0	0	0	0	135,975	269,440			
D537		0	0	0	0	122,824	198,414			
D538		0	0	0	0	80,736	56,940			
D539		0	0	0	0	50,596	0			
Total		11,085,575	12,426,188	11,434,321	9,956,490	15,449,154	17,888,131			

3.2 Please identify the amount of commodity sales provided to all customers (including those served at both distribution and transmission) by rate class in each year from 2006-2015 recorded and 2016-2020 forecast.

Response:

The table presented in Schedule Q-3.2 illustrates the actual sales of the supply service for the period beginning October 1, 2006 and ending September 30, 2016, as well as the forecasted sales

for the October 1, 2017 to September 30, 2018 period.

Note that the 2019 and 2020 forecasts are not currently available.

3.3 Please provide the incremental sales by rate class associated with transmission installed in and after 2006 to connect new service regions and new customers.

Response:

Gaz Métro has not installed any transmission lines to connect new customers since 2006.

3.4 Please provide the number of new customer connections by rate class, and within each block of rate D1, divided between residential and business customers, for each year from 2010-2016.

Response:

Installation of meters for new customers, by block and by rate

nber of signed sales							
	2010	2011	2012	2013	2014	2015	2016
Residential	5,202	5,179	5,131	3,693	3,426	3,172	2,753
Rate D ₁	5,202	5,179	5,131	3,693	3,426	3,172	2,753
Level 0 to 3 649	4,929	4,826	4,749	3,365	3,178	2,911	2,465
Level 3,650 to 10,949 m ³	166	197	211	208	163	151	168
Level 10,950 to 36,499 m ³	64	86	81	57	46	40	58
Level 36,500 to 109,499 m ³	35	64	73	57	34	58	47
Level 109,500 to 364,999 m ³	7	6	17	5	4	12	15
Level 365,000 to 1,094,999 m ³	1			1	1		

	2010	2011	2012	2013	2014	2015	2016
Business	1,732	2,166	2,386	2,376	2,346	2,358	2,290
Rate D_1	1,732	2,164	2,383	2,374	2,341	2,356	2,289
Level 0 to 3 649	341	451	412	448	416	497	45
Level 3,650 to 10,949 m ³	584	670	819	850	835	902	80′
Level 10,950 to 36,499 m ³	530	672	789	735	773	688	709
Level 36,500 to 109,499 m ³	204	271	269	252	219	180	233
Level 109,500 to 364,999 m ³	60	75	69	73	82	67	74
Level 365,000 to 1,094,999 m ³	10	22	20	9	11	16	,
Level 1,095,000 to 3,649,999 m ³	3	3	5	7	5	4	(
Level over 3,650,000 m ³						2	
Rate D ₃		2	3	2	4	2	1
Rate D ₄					1		
otal	6,934	7,345	7,517	6,069	5,772	5,530	5,04

LONG-RUN MARGINAL OPERATION COSTS THAT ARE NOT DIRECT COSTS OF CUSTOMER CONNECTION

4 References: i) Exhibit B-0178, GM-7, Doc 1 ii) Exhibit B-0145, GM-6, Doc 2.

Questions:

Regarding potential elements of long-run marginal operating costs and other overhead costs that are not direct costs of a customer connection identified in Phase 3A:

4.1 Please provide or identify the lead-lag study used to develop cash working capital from Gaz Metro's last rate case.

Response:

Subject to any representations that Gaz Métro may formulate in future regarding the use that will be made of the information sought by this question, in light of the issues already discussed in Phase 3A and those currently being addressed in this Phase 3B, Gaz Métro indicates that a complete and detailed study of the net working capital was filed in R-3397-98, in Exhibit SCGM-13, Document 11.

Moreover, for the calculations of the net working capital filed in the context of the 2017 Rate

Case, please refer to p. 10 of Exhibit B-0244 (Gaz Métro-6, Document 2) of R-3970-2016.

4.2 Please provide the number of staff and costs of the staff responsible for administering and marketing new customer connections in each year from 2010-2016. Identify the amount of these costs that is expensed, and the amount that is capitalized and included in the cost of the new connection. Break down staff costs and non-staff costs of acquiring and providing service to these new customers, into costs for residential and business customers.

Response:

Gaz Métro is unable to respond to this question as formulated. Gaz Métro does not record costs in the manner described by the intervenor, but will nonetheless present the information that is available.

Gaz Métro notes that the intervenor's question bears on both Phase 3A and Phase 3B.

Operating expenses

Considering that the evidence in Phase 3A is complete, and that the Régie has been apprised thereof and is currently being taken under consideration, Gaz Métro respectfully submits that the questions regarding operating expenses already dealt with in Phase 3A are irrelevant to the study of this Phase 3B.

Capitalized costs

Gaz Métro underscores that no capitalized cost has been associated with the new connections' administrative and marketing activities.

4.3 Please provide company-wide labor expenses in 2012-2016.

Response:

Subject to any representations that Gaz Métro may formulate in future regarding the use that will be made of the information sought by this question, in light of the issues already discussed in Phase 3A and those currently being addressed in this Phase 3B, Gaz Métro states that the total amount of wages for 2012 to 2016 is presented in the following table.

Year	Wages (\$000)
2012(1)	109,988
2013(²)	115,783
2014 ⁽³⁾	120,167
2015 ⁽⁴⁾	124,435
2016 ⁽⁵⁾	129,825

⁽¹⁾ R-3809-2012, B-0436, Gaz Métro-12, Document 15, p. 1, col. 2, 1.55.

4.4 Please provide corporate human resources expenses in 2012-2016.

Response:

Subject to any representations that Gaz Métro may formulate in future regarding the use that will be made of the information sought by this question, in light of the issues already discussed in Phase 3A and those currently being addressed in this Phase 3B, Gaz Métro reports that the labour costs of Gaz Métro, consisting of wages and fringe benefits, are presented for 2012 to 2016 in the following table.

Year	Wages	Fringe Benefits	Total
	(\$000)	(\$000)	(\$000)
2012(1)	109,988	49,056	159,044
2013(²)	115,783	69,656	185,439
2014 ⁽³⁾	120,167	62,318	182,485
2015 ⁽⁴⁾	124,435	62,804	187,239
2016 ⁽⁵⁾	129,825	64,959	194,784

⁽¹⁾ R-3809-2012, B-0436, Gaz Métro-12, Document 15, p. 1, col. 2, 1.55 and 56.

 $^{^{(2)}}$ R-3871-2013, B-0064, Gaz Métro-4, Document 6, p. 1, col. 1, 1.47.

 $^{^{(3)}}$ R-3916-2014, B-0019, Gaz Métro-4, Document 6, p. 1, col. 1, l.47.

⁽⁴⁾ R-3951-2015, B-0197, Gaz Métro-4, Document 5, p. 1, col. 1, 1.47.

⁽⁵⁾ R-3992-2016, B-0119, Gaz Métro-4, Document 5, p. 1, col. 1, 1.38.

 $^{^{(2)}}$ R-3871-2013, B-0064, Gaz Métro-4, Document 6, p. 1, col. 1, 1.47 and 48.

⁽³⁾ R-3916-2014, B-0019, Gaz Métro-4, Document 6, p. 1, col. 1, 1.47 and 48.

⁽⁴⁾ R-3951-2015, B-0197, Gaz Métro-4, Document 5, p. 1, col. 1, 1. 47 and 48.

⁽⁵⁾ R-3992-2016, B-0119, Gaz Métro-4, Document 5, p. 1, col. 1, 1. 38 and 39.

UNIT COSTS OF NEW CUSTOMER CONNECTIONS AND SYSTEM EXPANSIONS

5 References: i) Exhibit B-0178, GM-7, Doc 1

Questions:

Regarding unit costs of new customer connections and network expansions:

5.1 What is the average number of meters of main per new residential customer (by diameter) installed as part of new residential customer and network connections in each of the last five years (i.e., 2011-2015 inclusively)?

Response:

Gaz Métro does not have any information of the diameter of the service lines (mains) associated with signed sales.

Average length of service lines signed for by extension customers											
In m per customer anticipated at the time of the project's approval; by sector											
	2011	2012	2013	2014	2015						
Residential	8	7	9	9	11						
Business	375	165	137	164	336						

5.2 What is the average number of meters of main per new business customer (by diameter) installed as part of new business customer and network connections in each of the last five years (i.e., 2011-2015 inclusively)?

Response:

Please see the response to question 5.1.

5.3 Please provide the number of services installed in each year from 2006-2015 recorded and 2016-2020 forecast by rate class.

Response:

New customer connections, by segment and by rate

In number of signed sale

in number of signed sales	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Residential	2,850	2,587	3,528	2,156	2,541	2,394	2,202	1,762	1,704	1,620	1,589
Rate D ₁	2,850	2,587	3,528	2,156	2,541	2,394	2,202	1,762	1,704	1,620	1,589
Level 0 to 3,649	2,348	2,308	3,155	1,954	2,292	2,078	1,858	1,466	1,478	1,380	1,321
Level 3 650 to 10,949 m ³	441	182	283	139	157	180	197	191	150	142	155
Level 10,950 to 36,499 m ³	30	47	44	24	53	75	68	52	40	36	54
Level 36,500 to 109,499 m ³	28	38	41	36	31	55	64	48	31	50	45
Level 109,500 to 364,999 m ³	3	12	5	3	7	6	15	4	4	12	14
Level 365,000 to 1,094,999 m ³					1			1	1		
Affaires	2,207	2,142	2,043	951	1,063	1,292	1,631	1,538	1,614	1,553	1,502
Rate D ₁	2,207	2,142	2,042	951	1,063	1,290	1,628	1,536	1,609	1,551	1,501
Level 0 to 3 649 m ³	289	264	241	100	95	111	145	117	152	167	170
Level 3,650 to 10,949 m ³	729	852	684	293	338	376	528	558	589	621	514
Level 10,950 to 36,499 m ³	748	656	724	368	403	484	623	567	587	523	528
Level 36,500 to 109,499 m ³	329	275	304	146	164	221	245	213	189	157	207
Level 109,500 to 364,999 m ³	93	77	66	40	52	74	63	65	76	61	70
Level 365,000 to 1,094,999 m ³	18	13	18	4	8	21	19	9	11	16	6
Level 1,095,000 to 3,649,999 m ³	1	5	4		3	3	5	7	5	4	6
Level over 3,650,000 m			1							2	
Rate D ₃			1			2	3	2	4	2	1
Rate D ₄	_				_				1		
Total	5,057	4,729	5,571	3,107	3,604	3,686	3,833	3,300	3,318	3,173	3,091

Note that Gaz Métro does not prepare connection forecasts based on rates and volume levels.

Forecasts of new customer connections, by segment

In number of signed sales

	2017	2018	2019	2020
Residential	1,432	1,299	1,481	1,485
Business	1,522	1,547	1,592	1,600
Total	2,954	2,846	3,073	3,085

5.4 Please provide the average cost of a new service by rate class in current dollars, in each year from 2006-2015 recorded and 2016-2020 forecast. Divide residential into single-family and multi-family.

Response:

Note that Gaz Métro is not able to distinguish connection costs from meter costs for new individual sales. The separation of these costs was only introduced in 2016.

Average cost of signed sales for new customer connections, by segment and by rate

In \$ anticipated upon signing; includes meter costs

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Residential	1,591	1,704	1,942	1,756	1,726	1,901	1,933	2,053	2,167	2,217	2,515
Single-family homes	2,635	2,653	2,852	2,687	2,608	3,044	3,239	3,055	3,182	3,272	3,360
Rate 1	2,635	2,653	2,852	2,687	2,608	3,044	3,239	3,055	3,182	3,272	3,360
Level 0 to 3 649	2,500	2,614	2,810	2,644	2,565	2,991	3,186	2,957	3,077	3,176	3,201
Level 3,650 to 10,949 m ³	3,339	3,320	3,620	3,456	3,581	4,075	4,056	4,094	4,839	4,527	5,234
Level 10,950 to 36,499 m ³	2,047	2,114	2,234	4,488	4,426	2,517	5,291	5,360			5,797
Level 36,500 to 109,499 m ³											11,036
Condos	703	960	1,086	972	986	1,161	1,216	1,380	1,349	1,389	1,640
Rate 1	703	960	1,086	972	986	1,161	1,216	1,380	1,349	1,389	1,640
Level 0 to 3 649 m ³	660	781	869	828	788	872	879	1,029	1,016	1,029	1,163
Level 3,650 to 10,949 m ³	2,018	3,878	3,550	3,713	4,149	4,385	4,371	3,895	4,637	3,879	4,010
Level 10,950 to 36,499 m ³	1,655	3,163	4,053	3,758	3,482	3,760	5,658	4,227	4,432	5,036	4,815
Level 36,500 to 109,499 m ³	2,403	4,150	5,105	3,066	4,209	5,676	5,658	4,795	5,389	5,470	4,794
Level 109,500 to 364,999 m ³	2,740	4,954	1,978	2,275	3,396	5,533	2,559	15,984	12,740	7,271	7,359
Level 365,000 to 1,094,999 m ³					14,640			66,770	18,254		
Business	3,616	4,234	5,741	4,522	4,804	5,062	5,072	4,668	4,899	4,888	5,785
Rate 1	3,616	4,234	5,737	4,522	4,804	5,008	5,028	4,666	4,859	4,885	5,782
Level 0 to 3,649 m ³	2,142	2,850	2,750	2,262	2,245	1,990	2,128	1,971	2,239	2,005	2,315
Level 3,650 to 10,949 m ³	2,933	3,096	3,349	3,583	3,285	3,358	3,618	3,787	4,108	4,064	4,044
Level 10,950 to 36,499 m ³	3,446	4,289	4,749	4,510	4,739	5,208	4,911	4,999	4,981	5,431	5,898
Level 36,500 to 109,499 m ³	4,986	6,329	8,791	8,453	9,075	8,524	7,857	7,228	8,729	8,747	8,492
Level 109,500 to 364,999 m ³	7,594	9,845	12,505	14,592	13,206	12,114	15,936	12,112	10,635	15,326	17,647
Level 365,000 to 1,094,999 m ³	16,583	19,851	82,545	16,156	33,520	38,286	38,896	43,393	17,241	14,677	33,119
Level 1,095,000 to 3,649,999 m ³	0	21,946	54,414		48,793	42,912	55,333	29,174	38,172	25,847	202,234
Level over 3,650,000 m ³			122,221							86,106	
Rate 3			13,681			63,879	39,810	7,237	29,545	8,377	11,532
Rate 4									0		
Total	2,149	2,457	2,872	2,488	2,495	2,833	2,929	3,077	3,278	3,356	4,000

Note that Gaz Métro does not prepare connection forecasts based on rates and volume levels.

Forecasts of the average cost of signed sales for new customer connections, by segment

In \$ anticipated upon signing; includes meter costs

	2017	2018	2019	2020
Residential	1,722	2,164	2,331	2,365
Business	4,421	4,957	5,032	5,112

5.5 Please provide the number of meters installed in each year from 2006-2015 recorded and 2016-2020 forecast by rate class.

Response:

Installation of meters for new customers In number of signed sales													
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
Total	8,017	7,202	8,348	5,535	6,934	7,345	7,517	6,069	5,772	5,530	5,043		
E	4 11 1 6	,											

In number of signed sales				
	2017	2018	2019	2020
Total	4,794	4,642	4,956	4,976

5.6 Please provide the average cost of a meter by rate class in current dollars.

Response:

Please see the response to question 5.4 regarding meter costs.

5.7 What is the average annual energy sales (expected under normal weather conditions) and peak demand per new residential customer over the last five years? Divide into single-family and multi-family if available. If this data is not available for residential customers, please provide the average annual energy sales (expected under normal weather conditions) and peak demand for the D1 rate block (and for each of the sub-blocks ("sous paliers") of D1, including D1.1a/b, D1.2, etc.).

Response:

Gaz Métro does not have information on peak volumes for new customers.

Average annual volu Expressed in m ³ per custom					
	2012 2013		2015 2016		
Single-family	2,084	2,157	2,091	2,029	2,125
Condos	3,559	3,810	3,221	4,697	5,958

For the capacity demanded, please refer to the response to question 3.1

5.8 What is the average cost of a new customer connection per residential customer in each of the last five years? Divide into main, service and meter/regulator, and divide into single- family and multi-family if applicable. If this data is not available for residential customers, please provide the average cost of a new customer connection per customer in each of the last five years for the D1 rate block (and for each of the sub-blocks ("sous paliers") of D1, including D1.1a/b, D1.2, etc.).

Response:

Gaz Métro emphasizes that service line costs are attributable to several clients, but that the majority of meter installations do not require new service lines. Moreover, an extension project that requires a new service line may be attributed to several customers over a number of years. Gaz Métro therefore presents the forecasted future service line costs per customer (after five years). The cost of connections and meters are presented in question 5.4.

Gaz Métro also points out that since an extension project is attributed to several customers, it is impossible to ascribe an average volume or rate to a service line, as customers on the service line may be in different rate blocks.

Average cost of signed service In \$ per customer upon the project's ap					
	2012	2013	2014	2015	2016
Single-family	2,591	1,588	1,505	2,305	1,549
Condos	656	1,057	1,750	1,428	3,054
Mixed residential	824	1,032	867	1,299	731

5.9 Please identify the total number of customers on the system by rate class in each year from 2006-2015 recorded and 2016-2020 forecast, so that an average number of dollars per customer may be calculated for certain activities.

Response:

Note that Gaz Métro has not prepared an official forecast of the number of customers for the 2017-2018 period, and that it will not prepare one for 2019-2020.

Number of customers on the system, per rate

In numbers													
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017p	2018p
Rate D ₁	164,855	168,829	172981	177,064	180,046	183,302	188,684	192,283	194,940	197,236	199,850	200,389	201,809
Rates D_m ,and D_3	1,625	1,670	1,690	1,712	1,684	1,588	187	217	250	265	268	257	257
Rate D ₄	89	85	82	79	77	76	84	73	86	94	98	97	101
Rate D ₅	217	188	184	172	179	166	151	138	126	103	80	71	70
Total	166,787	170,773	174,937	179,027	181986	185,132	189,106	192,711	195,402	197,698	200,296	200,814	202,237

PROFITABILITY OF NETWORK ADDITIONS IN RECENT YEARS

6 Reference: i) Exhibit B-0220, GM-7, Doc 2, Tables 1 and 2, pp. 7-8.

Questions:

Regarding the profitability of individual and aggregate network additions made in recent years, related to Tables 1 and 2 in Reference (i):

6.1 For each network addition made in and after 2012, please provide (i) the cost of the network addition; (ii) the number of customers (divided into residential and non-residential); (iii) annual revenues in the year after the network was installed; (iv) the number of customers and annual revenue added to that network addition (as a result of densification) in each year after installation. Also, identify those specific additions, which were undertaken at the time of street repaving and those undertaken for new industrial parks. If this information is too burdensome, provide data on a sample of 50 extensions in each year and answer part 6.2.

Response:

The information that Gaz Métro provides dates back not to the time of signing but to the time of the project's approval, and may not be accurate. The reason Gaz Métro has chosen to proceed in this manner is that since 2012, the approved projects have not yet had a chance to achieve their full potential that was identified at the time of approval.

What is more, the exercise of evaluating densification as specified in the methodology set out in Exhibit B-0220, Gaz Métro-7, Document 2, requires far more time and effort. That being said, the exercise was fully completed for the years 2009 to 2013. Gaz Métro therefore refers to the response to question 9.3 of the Régie's request for information no. 9 (Gaz Métro-9, Document 1).

The document of this schedule therefore presents the costs forecasted at the time of the project's approval, namely the cost of service lines, connections and meters, as well as the financial assistance net of the anticipated customer contributions. The document also indicates the number of customers forecasted for the first year as well as for the four following years, and the associated revenues for each year.

Please see Schedule Q-6.1 for details on each project.

6.2 For each type of residential and business extension (AMT, other extensions, extensions caused by street repaving, and extensions caused by industrial park development) please provide the following amounts in total for extensions in each year in and after 2012: (i) number of customers connecting to each type of extension immediately and annual revenues in the year after the network was installed; (ii) the number of customers and annual revenues added to that network addition (as a result of densification) in each year after the installation to the present (i.e., 2013-2016 additions for connections installed in 2012, 2014-2016 additions for

Original: 2017.06.27 Gaz Métro - 9, Document 4

connections installed in 2013, etc.); and (iii) the number of customers projected to connect to each type of extension installed in 2012 and each of the subsequent years in the five and ten year time horizons.

Response:

The information requested represents the information that has been compiled since the new methodology was implemented. Gaz Métro therefore has no information on repaving or industrial park projects that took place prior to 2016, and did not carry out AMT projects. For more information regarding the number of customers and revenues, see the table below.

Number of forecasted cust	Number of forecasted customers and revenues for the extensions approved in 2016														
Per type		Accum	ulated nu	umber of cus	tomers		I	Revenues (\$000)							
	Y 1	Y2	Y3	Y4	Y5	Y 1	Y2	Y3	Y4	Y5					
Residential projects	349	665	916	1,074	1,195	155	399	599	746	836					
Profitable	230	413	532	588	649	121	300	432	519	568					
AMT	119	252	384	486	546	34	100	167	227	267					
Business projects	196	235	240	242	245	1,220	1,345	1,426	1,445	1,461					
Profitable	128	161	165	166	167	1,009	1,111	1,174	1,186	1,192					
AMT	58	64	65	66	68	211	234	252	259	269					
AMT Industrial park	10	10	10	10	10	0	0	0	0	0					
AMT Repaving	0	0	0	0	0	0	0	0	0	0					

Please provide the total number of new residential customers added to the Gaz Metro system in each year from 2009-2015 and estimate the number of new residential customers connected in each year (i) who converted space heating and/or water heating from electricity; (ii) who converted space heating from fuel oil; (iii) who are new residential customers who never had space heating with other fuels.

Response:

New residential sales signed, by type

	- · · · · ·									
nu	mbers									
		2009	2010	2011	2012	2013	2014	2015	2016	
	Electric conversion, with heating	190	172	248	262	79	252	209	206	
	Fuel oil conversion, with heating	257	259	354	411	627	472	423	272	
	Other conversions, with heating	57	49	36	68	74	90	122	175	
	Conversions, without heating	165	198	246	249	262	266	250	198	
	New constructions	3,446	4,585	4,375	4,210	2,724	2,414	2,218	1,948	

Original: 2017.06.27

Please estimate the number of new residential customers connected in each year from 2009-2015 who have each of the following gas-fired end-uses installed (i) space heating; (ii) water heating; (iii) clothes drying; (iv) oven/stove; (v) gas fireplace; (vi) gas barbecue; and (vii) any other gas appliances and devices.

Response:

Gaz Métro does not have detailed information concerning the type of appliances that residential customers have installed.

6.5 Please estimate the number of new residential customers connected in each year from 2009-2015 who have the following combinations of gas-fired end-uses installed (i) space heating without any other gas end use; (ii) space heating and water heating, with or without other gas end uses; (iii) space heating without water heating but with one or more other gas end-uses; (iv) water heating without space heating or any other gas end-uses; (v) water heating without space heating with one or more other gas end uses; and (vi) one or more other gas end uses without both space heating and water heating.

Response:

Please see the response to question 6.4.

6.6 Please provide any statistics regarding relative profitability of network extensions and/or individual extensions as they are related to the specific end-uses of residential customers attaching to the network.

Response:

Please see the response to question 6.4.

METHODOLOGY FOR CALCULATION OF THE PROFITABILITY OF SPECIFIC PROJECTS

7 References: i) Exhibit B-0178, GM-7, Doc 1
ii) Exhibit B-0220, GM-7, Doc 2

Questions:

Regarding the methodology for making calculations of profitability for specific projects:

7.1 Please provide a representative calculation of profitability for an AMT Extension and another

more profitable extension for each of the business and residential markets showing all input assumptions and annual outputs (i.e., customers, volumes, and revenues), and if this calculation is developed on a spreadsheet, please provide the spreadsheet with working cells.

Response:

Please see the Excel file filed as Schedule Q-7.1.

7.2 Please provide and explain the basis for the following input assumptions regarding the annual cost of network additions used in the profitability analysis of customer connections and networks: (i) the capital structure and return by capital component (debt, common stock, preferred stock); (ii) the useful life of the extension for purposes of analysis; (iii) depreciable lives and net salvage, and the resulting depreciation rates for mains, services, and meters; (iv) property tax base and rate; (v) income tax rates; (vi) accelerated tax depreciation parameters; (vii) the ratemaking treatment of tax depreciation; (viii) inflation rates of future capital and O&M expenses; and (ix) the discount rate.

Response:

i) Capital structure:

Debt (54.0%) = 2.82%

Preferred shares (7.5%) = 4.44%

Common shares (38,5 %) = 8,90 %

Base: Please see decision D-2016-156.

ii) Useful life: 40 years

Base: Please see the response to question 7.1 of the FCEI.

iii) Amortization period:

Service lines (mains): 44.4 years (2.254% linear)

Connections (including meters): 21.0 years (4.755% linear)

Commercial programs: 10 years (10% linear)

Residual value: none

The other costs (general expenses, Union des municipalités du Québec expenses, contributions from customers or third parties and subsidies, where applicable) are allocated both to the service lines (mains) and connections, and are amortized accordingly.

Base: Please see the responses to questions 2.1 to 2.4 of the Régie.

iv) There is no property tax, but there is a provincial public utilities tax: marginal, 1.5%/year of the net fixed assets (excluding the commercial programs).

An annual royalty is also payable to the Régie de l'énergie (= \$0.60455/103m3 delivered) and

another one to the Régie du bâtiment (= $0.45600 \, \$/10^3 \text{m}^3$ delivered).

The rate of the Union des municipalités expenses is 2% of the basic costs of the service lines (mains) and connection costs if the work is carried out within the territory of one of the municipalities that has signed the accord between Gaz Métro and the Union des municipalités.

Base: The rates of the royalties to the Régie de l'énergie and the Régie du bâtiment are established using the last invoice received by Gaz Métro from each of the two agencies, divided by the actual volume distributed for the corresponding year. The UMQ expenses are established as provided for in the accord between Gaz Métro and the Union des municipalités.

- v) Income tax rate: 26.9% (federal and provincial rates combined)
 Base: Rates determined by the governments.
- vi) Accelerated depreciation rate: none
- vii) Capital cost allowance rates:
 - Service lines (mains): 6% (declining balance)
 - Connections: 6% (declining balance)
 - Commercial programs: 10% (linear)

Base: Service lines (mains) and connections are class 51 (for the purposes of the capital cost allowance). The capital cost allowance of the commercial programs is identical to the booked depreciation following a ruling obtained from the Canada Revenue Agency.

- viii) Rate of inflation: 0 %
- ix) Capitalization rate and weighted prospective capital cost: 5.28%

Base: Please see decision D-2016-156 and the response to question 11.2 of the request for information no. 2 of the expert ROEÉ (Gaz Métro-9, Document 6).

- x) Other generic inputs:
 - a. General corporate expenses of 14.53% (Base: Please refer to R-3958-2015, Gaz Métro-2, Document 1, pp. 2 and 3 for details on the calculation and to the responses to questions 7.1 and 7.2 of the Régie's request for information no. 9 for the updated grid).
 - b. The profitability analyses take into account the statutory transaction cost of \$157/year per customer, unindexed (Base: decision D-2013-106).
- xi) The inputs specific to each project are the following:
 - a. Basic service line (mains) expenses
 - b. General contractor expenses associated with the service lines (mains)
 - c. Basic connection expenses

- d. General contractor fees associated with the connections
- e. Meter costs
- f. Costs of non-depreciable projects (lots)
- g. Commercial program expenses (if any), such as the RCP and CASEP
- h. All customer contributions (where applicable)
- i. Any specific subsidy or external contribution
- j. Number of customers
- k. Sales volume (in m³)
- 1. Distribution rate (in ϕ/m^3)

Base:

For the estimate of the service line and connection costs (including the contractor expenses, cost of meters, and undepreciated costs), please see Gaz Métro-9, Document 1). For more information on contractor expenses, please see Exhibit B-0322, Gaz Métro-19, Document 2, pp. 47 to 49 of the 2014 Rate Case, R-3837-2013.

For commercial program expenses, please see Schedule Q-7.2, and for the RCP and CASEP, please refer to the document entitled *Mécanisme convenu par le groupe de travail à la phase 2 du PEN - R-3599-2006* (mechanism agreed on by the working group during Phase 2 of the agreement negotiation process), pp. 35 and 36.

As for the customer contributions, these are determined on a case-by-case basis so as to achieve a level of profitability deemed sufficient for the project.

External subsidies or contributions, when accessible, are also determined on a case-by-case basis so as to achieve a level of profitability deemed sufficient for the project, or in keeping with the amounts available.

7.3 Please provide actual inflation factors for gas capital spending and gas O&M spending for 2005-2016 recorded and projected inflation factors for 2017-2020.

Response:

The following table presents the inflation rate that is indicated in the exhibit on service cost developments in the context of the Gaz Métro rate cases (for example: R-3879-2014, B-0735, Gaz Métro-109, Document 4, 1.13). The table also refers to the response to question 4.6 of document B-0225, Gaz Métro-8, Document 7, from Phase 3A of this matter.

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Inflation	2.2%	1.6% o	1.6%0	09%0	1.4%o	2.6%0	2.6%0	1.6%o	33%0	1.6%0	24%0
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Inflation	2.0%	13%0	23%0	0.6%	13%0	2.6%	2.4%	1.1%	1.1%	1.8%0	2.0%

Inflation rates anticipated for 2017 to 2020:

Year	2017	2018	2019	2020
Projected inflation rates	1.5%	1.9%	2.0%	2.1%

7.4 Please provide information as to how Gaz Metro calculates revenues received from customers in the profitability analysis. This information should include (but not be limited to) (i) the customer charges and volumetric rates included in the calculation; and (ii) assumed rates of escalation of Gaz Metro customer charges and volumetric rates.

Response:

- i) The products considered in the profitability analysis were obtained simply by multiplying a volume by a volumetric weight. Since the volume consumed and the number of customers can increase in the first years, the rate may be adjusted annually in accordance with Gaz Métro's *Conditions of Service and Tariff* currently in force at Gaz Métro, and by applying for each year the best rate available for each customer, with all of the applicable rebates (if any). If there is more than one customer, the applicable volumetric rate will be the weighted average of the various customer rates. When the volumes consumed and the number of customers stabilizes, the volumetric rate is determined for the remaining years (no inflation considered).
- ii) No inflation is associated with volumetric rates or operating expenses in the profitability analysis of projects.
- 7.5 If revenues for any rate components in addition to distribution are included in Gaz Metro's profitability analysis, please identify those components. Specifically, provide the current rates and rates of future escalation, and identify any incremental costs for these non-distribution rate components that may offset some or all of the revenue.

Response:

No rate other than the distribution rated is included in the profitability analysis of projects.

7.6 Please provide internal engineering manuals or other documentation regarding the estimation of gas loads from new customers for use in the profitability analysis.

Response:

Please see the Gaz Métro document entitled *Guide de référence: contrat de distribution et de vente de gaz naturel efficacité énergétique - client sur réseau - 75 000 m³ et moins - partenariat (affaires et résidentiel)* (reference guide: agreement for the distribution and sale of natural gas energy efficiency - customer on system - 75,000 m³ and less - partnership (business and residential)), filed as Schedule Q-7.6.

7.7 Does Gaz Metro include the \$300 connection charge in Tariff Section 17.1.1.1 for new residential connections as revenue in its profitability analysis? If not, why not.

Response:

Gaz Métro does not include the \$300 connection charge in Tariff Section 17.1.1.1 for new residential customers as revenue in its profitability analysis. Gaz Métro uses this \$300 amount as a contribution that offsets the total investment.

7.8 Is the \$300 connection charge accounted for by Gaz Metro (i) as revenue in the year received or (ii) as a contribution in aid of construction that offsets gross plant, or (iii) as some combination of the two?

Response:

Please see the response to question 7.7.

7.9 Can the spreadsheet or other calculation method used by Gaz Metro identified in response to Question 7.1 also be used to analyze a shorter life of gas service that might arise due to future environmental regulations? If so, explain how; if not, why not.

Response:

Yes, the model for evaluating profitability may be adapted based on the useful life of a specific project. Some projects were moreover evaluated using a different useful life of 40 years.

8 Reference: i) Exhibit B-0178, GM-7, Doc 1, pp. 8-9 Questions:

Regarding the methodology for making calculations of profitability for specific projects:

8.1 Please provide an estimate of the percentage savings when a gas network addition is made at the time of street repaying relative to the cost if done at a different time than street repaying.

Response:

In the case of an average project, if the main service line's route is entirely located under municipal infrastructures (driving surfaces or sidewalks), savings of approximately 30% would be possible for the portion of the contractor's service costs, presuming that the project would be carried out concomitantly with the municipal work.

8.2 Please provide documentation supporting the statements regarding refusal of municipalities to allow Gaz Metro to install new mains and services in recently repaved areas.

Response:

Gaz Métro and the Union des municipalités du Québec (UMQ) have an agreement in principle that was reached in December of 2013. That agreement arose in a context where a number of claims were made regarding the establishment of urban public utilities (UPU) in the municipalities. In fact, these municipalities had an increasing number of requirements for UPUs, and had ordered fees in connection with the performance of their work. It is from this perspective that Gaz Métro and UMQ jointly decided to negotiate a global approach with Québec municipalities so as to facilitate the process for all parties.

To reach an agreement, several elements were discussed, such as the principle of no longer intervening with new driving surfaces that were created less than five years ago. This principle was one of the municipalities' prerogatives, which then became section 3(d) of the agreement in principle between Gaz Métro and UMQ:

[TRANSLATION]

- (d) Whenever possible, Gaz Métro undertakes to limit its interventions with driving surfaces that have undergone major work less than five (5) years ago. If Gaz Métro is required to intervene within that time frame, a specific agreement shall be entered into with the municipality.
- 8.3 Please provide the number of new customers connected to the Gaz Metro system in each year from 2006-2015 in areas where gas was installed at the time of repaying.

Response:

Gaz Métro did not compile data on or monitor extension projects or sales associated with repaving before adoption of the methodology that was presented in January 2017 in Exhibit B-0178, Gaz Métro-7, Document 1. Gaz Métro therefore does not have any information on the number of new customers associated with repaving between 2006 and 2015.

Application relating to the marginal costs of long-term service delivery

applied to the profitability analysis, R-3867-2013

9 Reference: i) Exhibit B-0178, GM-7, Doc 1, pp. 8-9.

Questions:

Regarding the special treatment of industrial park projects:

9.1 Please provide an estimate of the percentage savings when a gas network addition is made at the time of industrial park development relative to the cost if done at a different time.

Response:

In the case of an average project, if the main service line's route is entirely located under municipal infrastructures (driving surfaces or sidewalks), savings of approximately 30% would be possible for a portion of the contractor's service costs, presuming that the project would be carried out concomitantly with the municipal work.

10 Reference: i) Exhibit B-0220, GM-7, Doc 2, p. 8, lines 1-12

Questions:

Regarding Reference (i) and the 4.48% additional profitability of network projects due to increased gas consumption by customers who did not immediately connect to the network but connected later (i.e. densification):

10.1 Please provide documentation of the costs and revenues received over time from the individual projects from the 2009-2011 Fiscal Years that were analyzed to reach this conclusion.

Response:

The Excel file attached hereto as Schedule Q-10.1 presents, on a project-by-project basis and for each of the 2009, 2010 and 2011 sales development plans, the *a posteriori* total investments and *a posteriori* specified incomes.

10.2 Please explain why Gaz Metro believes that this analysis of business customers provides a reasonable estimate for residential customers.

Response:

Please see the response to question 4.10 of the FCEI's request for information no. 2 (Gaz Métro-9, Document 3).

11 Reference: i) Exhibit B-0220, GM-7, Doc 2, Schedule 1 Ouestions:

11.1 Please explain why the sales volumes for residential and small business customers in Year 1 were, in most cases, higher than the cumulative sales volumes and cumulative revenues in Year 2. What caused the decline?

Response:

The sales presented in the development plan include those requiring investments for new customers and additions whose consumption will be recurrent, but also ad hoc sales for temporary construction heating. Temporary heating is used to heat construction sites in the winter and to cure concrete. Since temporary heating is usually required at the beginning of projects, the number of new customers and volume are generally higher in year 1 than in year 2.

11.2 For each year of the development plans described in the spreadsheets (i.e. 2008-2009 to 2015-2106) please provide the rates used to calculate residential revenues.

Response:

Please see the file filed in Schedule Q-11.2.

Development of the System Number, in meters, of new service lines and installation costs from 2006 to 2020 (in linear meters and \$)

		Actua	al - 2006	Actua	ıl - 2007	Actua	l - 2008	Actua	Actual - 2009		l - 2010	Actua	Actual - 2011		Actual - 2012		ıl - 2013	Actual - 2014		Actual - 2015		Actual - 2016	
Type of line	Diameter	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
Steel	60,3	25	17,576	5	6,154	-	-	126	57,749	-	-	-	-	-	-	88	57,326	34	62,449	42	26,268	18	31,745
	114,3	659	303,768	59	78,355	-	-	2,831	811,784	29	22,391	-	-	-	-	680	525,987	169	141,535	355	515,046	57	89,268
	168,3	-	-	19	739	-	-	2,924	883,419	137	106,963	-	-	-	-	1,627	1,275,445	593	314,620	157	312,303	1,876	1,209,480
	219,1	-	-	-	0	372	122,838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	395	708,707
	26,7	-	-	-	-	-	-	-	-	1	161	-	-	-	-	-	-	4	1,747	-	-	-	-
	42,2	-	-	-	-	1	247	57	12,562	-	-	-	-	-	-	113	48,130	-	-	35	12,854	-	-
Plastic	60,3	60,795	6,931,533	23,020	2,569,710	23,212	2,991,222	19,848	2,455,380	18,217	2,461,484	24,534	3,184,467	9,205	1,590,938	19,911	4,248,118	13,789	3,431,057	11,440	2,763,399	21,329	4,534,175
Flastic	114,3	60,360	8,459,492	29,250	3,988,439	27,760	4,247,617	20,840	3,241,061	17,050	2,396,785	18,627	2,883,077	10,610	1,895,862	31,783	6,922,604	23,343	4,942,448	25,643	6,738,463	30,796	7,506,148
	168,3	15,784	2,464,716	6,531	1,160,297	6,774	1,123,815	16,731	2,270,337	3,817	1,045,469	1,972	412,370	2,258	464,599	22,344	4,195,381	14,457	4,525,498	18,629	4,146,984	14,208	4,512,726
	219,1	-	-	-	-	81	29,884	225	58,980	-	-	-	-	-	-	7,252	2,075,183	4,002	1,108,579	3,441	671,164	221	48,018

		Forecas	t - 2017	Forecas	t - 2018	Forecas	t - 2019	Forecas	t - 2020
Type of line	Diameter	Qty	\$	Qty	\$	Qty	\$	Qty	\$
Steel and plastic	All diameters	59,188	16,688,402	67,730	19,011,286	57,730	16,442,906	57,730	16,459,105

Reinforcement of Distribution System Number, in meters, of new service lines and installation costs from 2006 to 2020 (in linear meters and \$)

		Actua	l - 2006	Actua	ıl - 2007	Actua	l - 2008	Actua	al - 2009	Actua	al - 2010	Actua	ıl - 2011	Actu	al - 2012	Actua	l - 2013	Actua	al - 2014	Actua	ıl - 2015	Actua	l - 2016
Type of line	Diameter	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
Steel	114,3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	94	237 629	-	-		-
Steel	168,3	5	1,220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	60,3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	169	60,809	-	-	10	5,618
Plastic	114,3	25	3,108	-	-	105	31,556	2,377	402,247	-	-	418	135,283	-	-	235	63,585	454	281,482	311	294,207	79	49,110
Plastic	168,3	8,891	1,237,568	2,975	510,361	-	-	2,884	643,630	-	-	89	81,086	-	-	1,958	588,528	-	-	210	219,689	6,860	2,563,159
	219,1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	893	241,514	-	-	-	-	1,029	331,713

		Forecas	st - 2017	Forecas	st - 2018	Forecas	st - 2019	Forecas	st - 2020
Type of line	Diameter	Qty	\$	Qty	\$	Qty	\$	Qty	\$
Steel and plastic	All diameters		1,186,732		1,174,065		1,191,784		1,192,959

Improvement of the System

Number, in meters, of replacement service lines installed and installation costs from 2006 to 2016 (in linear meters and \$)

		Actual	- 2006	Actua	ıl - 2007	Actual	- 2008	Actua	ıl - 2009	Actua	al - 2010	Actua	l - 2011	Actua	al - 2012	Actua	al - 2013	Actua	l - 2014	Actua	al - 2015	Actua	al - 2016
Type of line	Diameter	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	60,3	61	12,228	-	-	-	-	-	-	877	144,494	901	211,664	229	38,259	121	38,390	32	20,163	-	-	-	-
	114,3	836	205,818	47	32,425	-	-	1,364	1,002,573	518	555,958	659	346,366	785	138,133	106	137,813	8	11,771	-	-	10	18,519
Steel	168,3	29	5,834	-	-	-	-	-	-	289	622,055	1,178	572,600	15	10,625	445	215,132	832	2,180,734	977	592,830	1,476	1,530,754
	219,1	-	-	-	-	-	-	240	186,617	507	223,602	812	271,363	-	-	73	159,716	56	86,576	153	651,444	-	-
	323,9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	270	774,402	-	-	-	-
	26,7	-	-	-	-	-	-	-	-	1	521	-	-	-	-	1	843	-	-	-	-	-	
	42,2	-	-	-	-	-	-	-	-	4	1,074	-	-	-	-	-	-	-	-	-	-	-	ı
Plastic	60,3	3,334	590,314	1,247	226,820	2,919	562,243	6,931	1,687,448	16,151	2,548,151	14,706	4,558,293	8,633	2,113,187	15,981	4,955,604	13,688	5,307,897	20,848	8,003,998	14,303	4,769,466
Plastic	114,3	3,210	815,409	2,804	481,718	3,541	959,319	12,383	3,329,564	4,761	916,111	9,867	3,584,207	4,063	1,473,464	7,194	2,381,707	3,854	828,714	5,052	2,386,476	6,428	2,691,710
	168,3	625	565,394	1,899	766,481	4,525	569,725	1,742	725,181	6,448	1,756,088	2,113	599,068	5,730	2,458,191	7,394	2,756,223	6,571	3,151,495	5,918	2,676,247	5,158	3,120,507
	219,1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	361	19,636	3,087	2,112,560	262	245,370	226	133,855

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Supply Revenues (\$000)

From October 1, 2006 to September 30, 2016 and projections for October 1, 2017 to September 30, 2018

Forecasts for October 1, 2017 to September 30, 2018

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	DT2017	DT2018
	Owner to Bossesson	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Supply Revenues													
	Sale/Purchase of System Gas and													
	Fixed Price													
1	Low and medium flow:													
2	Rate 1 **	540,750	453,742	461,112	464,177	355,841	348,903	253,266	243,489	308,468	271,695	195,930	312,341	335,659
3	Rate M	200,524	156,811	161,290	154,149	120,157	107,819	72,214	52,168	61,597	48,278	27,432	2,293	- \$
4	Rate 3.3	1,304	430	103	247	229	157	1,621	1,988	2,342	2,300	1,677	2,456	2,440
5	Rate 3.4	3,555	1,523	839	692	638	563	5,358	6,907	9,259	7,979	5,956	7,695	8,725
6	Rate 3.5	5,527	3,200	2,256	1,822	1,547	1,373	5,633	8,265	10,030	9,308	6,219	11,756	10,852
7	Low and medium flow	751,660	615,707	625,599	621,086	478,412	<u>458,816</u>	338,092	312,819	<u>391,695</u>	339,560	237,216	336,541	<u>357,676</u>
8	High flow:													
9	Rate 4.6	36,875	26,269	27,340	15,454	15,142	13,351	7,640	7,263	11,151	10,606	7,642	11,794	11,924
10	Rate 4.7	40,368	24,443	19,254	11,072	21,402	24,559	13,729	12,548	13,524	11,203	8,148	15,483	16,889
11	Rate 4.8	53,352	46,854	51,644	39,981	23,845	3,022	1	0	4,837	10,436	8,974	22,910	30,444
12	Rate 4.9	0	0	0	0	19,553	20,430	17,491	15,969	18,583	7,105	-	-	- \$
13	Rate 4.10	(17)	0	0	0	(0)	0	(0)	(0)	-	-	-	-	- \$
14	Other rate		-	-	-	-	(1)	-	-	-	-	-	-	- \$
15	Continuous	130,577	97,566	98,238	66,508	79,943	61,356	3,8861	35,779	48,095	39.350	24,764	<u>50,187</u>	<u>59,257</u>
40	Data 5.5	44 504	26,209	24,258	30,172	22,206	22,635	40.050	12,134	44.000	8,971	5,618	9,269	11,336
16 17	Rate 5.5 Rate 5.6	41,531	26,209 24,719	24,258 27,313	22,636	22,206 18,720	22,635 15,734	16,850 10,150	7,773	11,880 8,421	4,739	2,232	9,269 2,763	,
18	Rate 5.7	36,874 33,852	14,638	15,424	12,915	10,132	9,309	6,637	6,563	4,521	2,024	2,232 1,324	2,763 1,636	3,778 573
19	Rate 5.7	41,828	36,153	26,052	13,329	23,781	1,290	0,037	(0)	1,202	1,472	1,324	-	- \$
20	Rate 5.9	41,020	0	20,032	0	2,223	2,487	4,768	2,953	2,083	543	-	_	- \$
21	Rate 5.9	-	-	-	_	-	2,407	4,700	2,933	2,003	-	_	_	- \$
22	Make-up rate	1,414	1,407	934	902	1,374	678	990	2,489	1,848	4,078	2,060	_	2,978
23	Interruptible	155498	103125	93,981	79,955	78,436	52,132	39,395	31,912	<u>29,954</u>	21,826	11251	13,668	18,665
24	High flow	286075	200691	192,218	146,463	158,379	113,488	78,256	67,691	78,049	61,176	<u>36,015</u>	63,855	77,922
25	TOTAL	1037735	816398	817,817	767,549	636,791	572,304	416,348	380,510	469,744	400,736	273,231	400,396	435,598
25	IOIAL	1037733	010390	110,110	101,349	030,791	512,304	+10,340	300,310	409,744	400,730	213,231	400,390	433,396

		ser\ the profitability	vice delivery applied to analysis, R-3867-2013
		, ,	
Schedu	le Q-6.1 is filed as	s a separate Exc	el file.

Gaz Métro Limited Partnership Application Application relating to the marginal costs of long-term

the profitability analysis, R-3867-2013
Schedule Q-7.1 is filed as a separate Excel file.
•

Gaz Métro Limited Partnership Application Application relating to the marginal costs of long-term service delivery applied to



REBATE CONSUMPTION PROGRAM (RCP)

IN FORCE ON JUNE 1, 2014

Gaz Métro Limited Partnership



1 DEFINITIONS

In the Rebate Consumption Program (RCP), the following words and abbreviations shall have the meaning given below:

Beneficiary Person to whom the distributor grants an RCP

Distributor Gaz Métro

RCP Rebate Consumption Program

Régie Régie de l'énergie

Customer Any individual or legal person, corporation, partnership or

organization that has entered into a contract with the

distributor

Residential Customer Person who incurs eligible expenses for a single-family

structure, individual condominium, duplex or triplex

MAO - Commercial Program Contractual undertaking on the part of the beneficiary to

consume a minimum annual volume of natural gas to be entitled to the RCP. The annual volume of natural gas is established based on the volume of the customer's consumption required in order to be profitable for Gaz Métro in light of the amount granted under the RCP

2 GENERAL PROVISIONS

2.1 <u>Scope</u>

The purpose of the RCP is to promote the consumption of natural gas by increasing the use of equipment that runs on this fuel.

The introduction of such equipment must take place for either of the two following purposes:

- 2.1.1 Increasing the volume of gas withdrawn by an existing customer.
- 2.1.2 Closing new gas sales with a new customer.

2.2 **Eligibility**

2.2.1 The RCP may be offered to a beneficiary that incurs the eligible expenses contemplated in section 2.5.

2.3 Nature and limit of the RCP

- 2.3.1 The amount paid under the RCP is established in such a manner as to allow a beneficiary to maximize returns, in a fair and reasonable manner, when setting up new pieces of equipment that use natural gas.
- 2.3.2 The value of the monthly amounts that are expected to be paid in the course of the contractual period shall be discounted at the distributor's weighted average prospective capital cost, as approved by the Régie and in force at the time the contract is executed by the distributor.
- 2.3.3 The amount paid under the RCP in ϕ/m^3 is established by multiplying the value of a monthly payment in dollars (\$) by 12 X 100 and by dividing this product by the minimum annual consumption to which the customer committed.
- 2.3.4 The amount paid under the RCP in ¢/m³ must not be greater than 100% of the average unit price of the distribution service rate agreed on with the customer.
- 2.3.5 The amounts paid under the RCP must allow the distributor to ensure that the connection is profitable.
- 2.3.6 Any instalment under this program will be made as a lump sum or, at the customer's request, in



- fixed monthly instalments distributed over the contractual period.
- 2.3.7 The total amount paid under the RCP may not exceed 100% of the eligible expenses.
- 2.3.8 The distributor may not, by virtue of the amount paid under the RCP, be held liable for the debts or financial commitments of the beneficiary.

2.4 Conditions for obtaining an RCP

- 2.4.1 To be eligible to receive an RCP, the beneficiary must undertake to consume natural gas by entering into a contract with an initial term of no less than five years.
- 2.4.2 The beneficiary must honour its MAO commercial program.
- 2.4.3 If the beneficiary does not consume the minimum annual volume in the course of any one of the periods of 12 months agreed upon in the contract, Gaz Métro will stop the monthly payments and, where applicable, claim a compensation for payments already made to the customer corresponding to that portion of the amount paid under the RCP.
 - 2.4.3.1 The amount claimed shall be equal to the difference between the volume consumed and the minimum annual volume for the contract year in question, multiplied by the lesser of the average price of the distribution rate paid in the course of the 12 months of the contractual year or the average price of the distribution rate resulting from the billing of the volume deficits uniformly distributed over the contract year.
 - 2.4.3.1.1 If the beneficiary has an MAO rate, the amount billed for the volume deficit may be no less than what would have been billed under the MAO rate
 - 2.4.3.1.2 If the beneficiary does not have an MAO rate, the compensatory amount obtained under section 2.4.3.1 for a year shall not exceed the total amount paid under the RCP, divided by the term of the contract in years.
- 2.4.4 In the case of a new construction involving D1 or D3 rate customers (excluding customers that use natural gas mainly for processes) and all residential customers, the customer does not need to contractually undertake to consume natural gas in order to be eligible and does not need to subscribe to an MAO commercial program. The equipment must be installed during the construction of the new building in order to be considered part of the new construction.
- 2.4.5 If the beneficiary is the developer or builder of a new construction project involving D1 or D3 rate customers (excluding customers that use natural gas primarily for processes), the beneficiary does not need to contractually undertake to consume natural gas in order to be eligible and does not need to subscribe to an MAO commercial program.
- 2.4.6 Notwithstanding sections 2.4.4 and 2.4.5 above, if the customer leases gas equipment:
 - 2.4.6.1 the amount paid under the RCP shall be paid in a single instalment only if the customer or the lessee contractually agrees to the piece of equipment contemplated by the RCP program being used for a period of no less than five years.
 - 2.4.6.2 Otherwise, the RCP amount will be paid in the form of monthly instalments, as prescribed in sections 2.3.2 and 2.3.3.
- 2.4.7 The RCP is only available once per address and per purpose.
- 2.4.8 The amount granted under the RCP will be paid after the work is approved by the distributor.
- 2.4.9 A tenant in an immoveable may avail itself of the RCP, provided it first presents to the distributor the written authorization of the immoveable's owner to carry out the conversion or installation.
- 2.4.10 If a customer has agreed to an annual consumption volume lower than 75,000 m³, the customer does not need to contractually commit to consume natural gas in order to be eligible to receive the RCP and does not need to subscribe for an MAO commercial program.

2.5 Eligible expenses

For the purposes of evaluating any amount granted under the RCP, the distributor may consider the



following expenses as being eligible:

- 2.5.1 Cost of material and labour required to install pipes downstream of the point at which the immoveable is connected up to the natural gas equipment, subject to the limits prescribed by the distributor.
- 2.5.2 The cost of a new natural gas furnace and the installation thereof, in the case of a forced air heating system.
- 2.5.3 The cost of the burner or modifications to the burner or the boiler and the installation thereof, in the case of a hot water heating system.
- 2.5.4 The cost of the gas conversion burner or the boiler and the installation thereof, in the case of a back-up heating system.
- 2.5.5 The cost of a gas water heater and the installation thereof.
- 2.5.6 In the case of a storage system for heating running water, only the cost of the heating unit and the installation thereof.
- 2.5.7 In the case of an automatic circulation system for heating running water, only the cost of the heating unit and the installation thereof.
- 2.5.8 The cost of an air conditioner or gas heat pump, and the installation thereof.
- 2.5.9 The cost of leasing the gas equipment listed above.
- 2.5.10 The cost of preliminary studies (heat budget, feasibility study, profitability study, etc.) when deemed necessary by the distributor.
- 2.5.11 The replacement of the smoke duct's barometric control.
- 2.5.12 The replacement of the smoke duct, if deemed necessary by the distributor.
- 2.5.13 The cost of the material and labour required to modify the fireclay plates in the combustion chamber in order to allow for the installation and adequate operation of the burner.
- 2.5.14 The cost of material and labour required to supply electrical power to the burner and its controls.
- 2.5.15 The cost of the combustion efficiency test.
- 2.5.16 The cost of material and labour associated with the combustion air inlet.
- 2.5.17 The cost of removing the oil tank as well as the devices rendered obsolete by the conversion.
- 2.5.18 The cost of modifying the chimney, when necessary.
- 2.5.19 The cost of initiating, engineering and managing the project associated with the eligible expenses provided for in section 2.5.
- 2.5.20 The cost of any improvement or additional control, provided that the distributor's explicit authorization is first obtained.
- 2.5.21 The cost of warm air ducts for heating.
- 2.5.22 The cost and installation of any gas-consuming device that is not defined in section 2.5 but meets the other conditions of the RCP, excluding peripheral devices.

2.6 Other provisions

Gaz Métro reserves the right, with the Régie's approval, to at all times amend the terms and conditions hereof or to terminate this RCP without prior notice.

2008-2009 DEVELOPMENT PLAN

						LOW A	ND MEDIUM OUT	PUT (LMO))					LAR	GE CORPORATI	ONS			TOTA	L	
Line	Description		RESIDE News				BUSINES New sale			1	TOTAL LM New sales				New sales				New sa	lles	
		On system	Extension projects	Projects >\$1.5 N	/I Total	On system	Extension projects	>\$1.5 M	Total	On system	Extension projects	>\$1.5 M	Total	On system	Extension projects	Extension >\$1.5 M	5 Total	On system	Extension projects	Extension >\$'	l.5 Total
1	Number of customers, year 1	1,119	935	-	2,054	1,945	116	-	2,061	3,064	1,051	-	4,115		13	-	13	3,064	1,064	-	4,128
2	Number of customers, year 2 (cumulative)	1,188	1,752	-	2,940	1,884	157	-	2,041	3,072	1,909	-	4,981		13	-	13	3,072	1,922	-	4,994
3	Number of customers, year 3 (cumulative)	1,269	2,231	-	3,500	1,884	177	-	2,061	3,153	2,408	-	5,561		13	-	13	3,153	2,421	-	5,574
4	Number of customers, year 4 (cumulative)	1,335	2,301	-	3,636	1,884	177	-	2,061	3,219	2,478	-	5,697		13	-	13	3,219	2,491	-	5,710
5	Number of customers, year 5 (cumulative)	1,335	2,301	-	3,636	1,884	177	-	2,061	3,219	2,478	-	5,697		13	-	13	3,219	2,491	-	5,710
6	Volumes (10 ³ m ³), year 1	4,469	877	-	5,345	35,992	5,078	-	41,070	40,461	5,954	-	46,415		61,307	-	61,307	40,461	67,261	-	107,722
7	Volumes (10 ³ m ³), year 2 (cumulative)	3,139	2,172	-	5,311	33,598	6,263	-	39,861	36,737	8,435	-	45,172		60,152	-	60,152	36,737	68,587	-	105,324
8	Volumes (10 ³ m ³), year 3 (cumulative)	3,339	3,210	-	6,549	33,598	6,738	-	40,336	36,937	9,948	-	46,885		60,563	-	60,563	36,937	70,511	-	107,448
9	Volumes (10 ³ m ³), year 4 (cumulative)	3,510	3,576	-	7,086	33,598	6,738	-	40,336	37,108	10,314	-	47,422		60,563	-	60,563	37,108	70,877	-	107,985
10	Volumes (10 ³ m ³), year 5 (cumulative)	3,564	3,638	-	7,202	33,598	6,738	-	40,336	37,162	10,376	-	47,538		60,563	-	60,563	37,162	70,939	-	108,101
11	Total rev. (\$000) year 1	1,004	259	-	1,264	5,741	611	-	6,353	6,746	870	-	7,616	-	1,516	-	1,516	6,746	2,386	-	9,132
12	Total rev. (\$000) year 2	810	653	-	1,462	5,391	739	-	6,130	6,200	1,392	-	7,592		1,426	-	1,426	6,200	2,818	-	9,019
13	Total rev. (\$000) year 3	854	998	-	1,852	5,391	786	-	6,177	6,245	1,784	-	8,029		1,422	-	1,422	6,245	3,206	-	9,451
14	Total rev. (\$000) year 4	911	1,124	-	2,035	5,391	786	-	6,177	6,302	1,910	-	8,212		1,422	-	1,422	6,302	3,332	-	9,633
15	Total rev. (\$000) year 5	927	1,144	-	2,071	5,391	786	-	6,177	6,318	1,930	-	8,248		1,422	-	1,422	6,318	3,352	-	9,670
16																					
17	Average rate (m³) year 1	22.48	29.56		23.64	15.95	12.04		15.47	16.67	14.62		16.41		2.47		2.47	16.67	3.55		8.48
18	Average rate (m ³) year 2	25.79	30.04		27.53	16.05	11.80		15.38	16.88	16.50		16.81		2.37		2.37	16.88	4.11		8.56
19	Average rate (m ³) year 3	25.58	31.09		28.28	16.05	11.67		15.31	16.91	17.93		17.12		2.35		2.35	16.91	4.55		8.80
20	Average rate (m³) year 4	25.94	31.44		28.71	16.05	11.67		15.31	16.98	18.52		17.32		2.35		2.35	16.98	4.70		8.92
21	Average rate (m³) year 5	26.01	31.45		28.76	16.05	11.67		15.31	17.00	18.60		17.35		2.35		2.35	17.00	4.72		8.95

2009-2010 DEVELOPMENT PLAN

	LOW AN	ID MEDIUN	OUTPUT	(LMO)														LARGE CO	ORPOR A	ATIONS						TOTAL				
ine Description		New Sale		ENTIAL			İ	New Sale		NESS				TOTAL LMO)			Nev	w Sales						New Sales					
	On system	Extension	Desiret.	Total	Additio- nal loads	Total	On	Extension projects		Total	Addition al loads	Total	On		>\$1. 5 M	Total	Addition al loads	Total	On	Extension projects	Extension >\$1.5 M	Total	Additional loads	Total	On system	Extension projects	Extension >\$1.5 M	Total	Additiona loads	^{al} Total
Number of customers, year 1	1,208	1,621	-	2,829	-	2,829	1,557	170	-	1,727	763	2,490	2,765	1,791	-	4,556	763	5,319	-	7	-	7	7	14	2,765	1,798	-	4,563	770	5,333
Number of customers, year 2 (cumulative)	1,346	2,857	-	4,203	-	4,203	1,465	193	-	1,658	763	2,421	2,811	3,050	-	5,861	763	6,624	-	7	-	7	7	14	2,811	3,057	-	5,868	770	6,638
Number of customers, year 3 (cumulative)	1,409	3,349	-	4,758	-	4,758	1,465	199	-	1,664	763	2,427	2,874	3,548	-	6,422	763	7,185	-	7	-	7	7	14	2,874	3,555	-	6,429	770	7,199
Number of customers, year 4 (cumulative)	1,409	3,481	-	4,890	-	4,890	1,465	199	-	1,664	763	2,427	2,874	3,680	-	6,554	763	7,317	-	7	-	7	7	14	2,874	3,687	-	6,561	770	7,331
Number of customers, year 5 (cumulative)	1,442	3,483	-	4,925	-	4,925	1,465	199	-	1,664	763	2,427	2,907	3,682	-	6,589	763	7,352	-	7	-	7	7	14	2,907	3,689	-	6,596	770	7,366
Volumes (10 ³ m ³), year 1	5,018	1,453	-	6,471	-	6,471	30,352	4,273	-	34,626	18,845	53,471	35,370	5,726	-	41,096	18,845	59,941	-	1,378	-	1,378	32,153	33,531	35,370	7,104	-	42,474	50,998	93,472
Volumes (10 ³ m ³), year 2 (cumulative)	3,146	3,864	-	7,009	-	7,009	26,519	9,081	-	35,600	18,845	54,445	29,665	12,944	-	42,609	18,845	61,454	-	1,578	-	1,578	5,611	7,189	29,665	14,522	-	44,187	24,456	68,643
Volumes (10 ³ m ³), year 3 (cumulative)	3,281	5,217	-	8,498	-	8,498	26,519	9,426	-	35,944	18,845	54,790	29,800	14,642	-	44,442	18,845	63,288	_	1,578	-	1,578	5,611	7,189	29,800	16,220	-	46,020	24,456	70,477
Volumes (10 ³ m ³), year 4 (cumulative)	3,331	5,841	_	9,172	_	9,172	26,519	9,454	_	35,972	18,845	54,818	29,850	15,295	_	45,145	18,845	63,990	_	1,578	_	1,578	5,611	7,189	29,850	16,873	-	46,723	24,456	71,179
Volumes (10 ³ m ³), year 5 (cumulative)	3,372	6,005	-	9,377	-	9,377	26,519	9,454	-	35,972	18,845	54,818	29,891	15,458	-	45,349	18,845	64,195	-	1,578	-	1,578	5,611	7,189	29,891	17,036	-	46,927	24,456	71,384
1 Total revenues (\$000) year 1	1,127	459		1,586		1,586	5,312	619		5,931	2,436	8,366	6,439	1,078		7,517	2,436	9,952		160		160	542	702	6,439	1,237		7,676	2,978	10,654
2 Total rev. (\$000) year 2	878	1,226		2,104		2,104	4,735	908		5,643	2,436	8,079	5,614	2,133		7,747	2,436	10,183		177		177	198	375	5,614	2,310		7,924	2,633	10,557
3 Total rev. (\$000) year 3	924	1,683		2,608		2,608	4,735	961		5,696	2,436	8,132	5,659	2,644		8,303	2,436	10,739		177		177	198	375	5,659	2,821		8,480	2,633	11,114
4 Total rev. (\$000) year 4	937	1,862		2,800		2,800	4,735	966		5,701	2,436	8,137	5,673	2,829		8,501	2,436	10,937		177		177	198	375	5,673	3,005		8,678	2,633	11,311
5 Total rev. (\$000) year 5	945	1,910		2,855		2,855	4,735	966		5,701	2,436	8,137	5,680	2,876		8,556	2,436	10,992		177		177	198	375	5,680	3,053		8,733	2,633	11,366
6																													+	+
7 Average rate (m ³) year 1	22.45	31.62		24.51		24.51	17.50	14.48		17.13	12.92	15.65	18.20	18.83		18.29	12.92	16.60		11.58		11.58	1.69	2.09	18.20	17.42		18.07	5.84	11.40
8 Average rate (m³) year 2	27.92	31.72		30.02		30.02	17.86	10.00		15.85	12.92	14.84	18.92	16.48		18.18	12.92	16.57		11.20		11.20	3.52	5.21	18.92	15.91		17.93	10.77	15.38
9 Average rate (m³) year 3	28.17	32.27		30.68		30.68	17.86	10.19		15.85	12.92	14.84	18.99	18.06		18.68	12.92	16.97		11.20		11.20	3.52	5.21	18.99	17.39		18.43	10.77	15.77
0 Average rate (m³) year 4	28.14	31.88		30.52		30.52	17.86	10.22		15.85	12.92	14.84	19.00	18.49		18.83	12.92	17.09		11.20		11.20	3.52	5.21	19.00	17.81		18.57	10.77	15.89
1 Average rate (m³) year 5	28.01	31.81		30.44		30.44	17.86	10.22		15.85	12.92	14.84	19.00	18.61		18.87	12.92	17.12		11.20		11.20	3.52	5.21	19.00	17.92		18.61	10.77	15.92

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									ı	LOWANDI	ІЕДІИМ ООТ	TPUT(LMO))								LARGE	CORPORATI	ONS					TOTAL			
Line	e Description			RESIDE	ENTIAL					BUSIN	ESS				TOTAL	<i>LMO</i>															
			New S	Sales					New	Sales					NewS	ales				ļ	New	Sales					New	Sales			
		On system	Extension projects	Projects >\$1.5 M	Total	Additional loads	Total	On system	Extension projects	>\$1.5 M	Total	Additional loads	Total	On system	Extension projects	>\$1.5M	Total	Additional loads	Total	On system	Extension projects	Extension >\$1.5 M	Total	Additional loads	Total	On system	Extension projects	Extension >\$1.5 M	Total	Additional loads	Total
1	Number of customers, vear 1	1,464	1,482	-	2,946	-	2,946	1,845	235	26	2,106	703	2,809	3,309	1,717	26	5,052	703	5,755	-	1	-	1	8	9	3,309	1,718	26	5,053	711	5,764
2	Number of customers, year 2 (cumulative)	1,502	2,617	-	4,119	-	4,119	1,733	277	50	2,060	703	2,763	3,235	2,894	50	6,179	703	6,882	-	1	-	1	5	6	3,235	2,895	50	6,180	708	6,888
3	Number of customers, year 3 (cumulative)	1,575	3,008	-	4,583	-	4,583	1,733	290	63	2,086	703	2,789	3,308	3,298	63	6,669	703	7,372	-	1	-	1	6	7	3,308	3,299	63	6,670	709	7,379
4	Number of customers, year 4 (cumulative)	1,575	3,090	-	4,665	-	4,665	1,733	290	66	2,089	703	2,792	3,308	3,380	66	6,754	703	7,457	-	1	-	1	6	7	3,308	3,381	66	6,755	709	7,464
5	Number of customers, year 5 (cumulative)	1,575	3,090	-	4,665	-	4,665	1,733	290	66	2,089	703	2,792	3,308	3,380	66	6,754	703	7,457	-	1	-	1	6	7	3,308	3,381	66	6,755	709	7,464
6	Volumes (10 ³ m ³), year 1	6,748	1,303	-	8,052	-	8,052	34,378	17,419	11,507	63,304	20,557	83,861	41,126	18,723	11,507	71,356	20,557	91,913	-	50	-	50	32,928	32,978	41,126	18,773	11,507	71,406	53,485	124,891
7	Volumes (10 ³ m ³), year 2 (cumulative)	3,625	3,864	-	7,488	-	7,488	29,259	17,651	12,062	58,973	20,557	79,530	32,884	21,515	12,062	66,461	20,557	87,018	-	75	-	75	13,025	13,100	32,884	21,590	12,062	66,536	33,582	100,118
8	Volumes (10 ³ m ³), year 3 (cumulative)	3,496	5,217	-	8,713	-	8,713	29,259	18,014	12,489	59,763	20,557	80,320	32,755	23,231	12,489	68,475	20,557	89,032	-	75	-	75	14,125	14,200	32,755	23,306	12,489	68,550	34,682	103,233
9	Volumes (10 ³ m³), year 4 (cumulative)	3,199	5,841	-	9,040	-	9,040	29,259	18,014	12,626	59,900	20,557	80,457	32,458	23,856	12,626	68,940	20,557	89,497	-	75	-	75	15,875	15,950	32,458	23,931	12,626	69,015	36,432	105,447
10	Volumes (10°m°), year 5 (cumulative)	3,067	6,005	-	9,072	-	9,072	29,259	18,014	12,626	59,900	20,557	80,457	32,326	24,019	12,626	68,971	20,557	89,528	-	75	-	75	15,875	15,950	32,326	24,094	12,626	69,046	36,432	105,478
11	Total rev. (\$000) year 1	2,028	391	-	2,419	-	1,905	6,422	1,606	800	8,828	2,419	11,247	8,450	1,997	800	11,247	2,419	13,153	-	10		10	828	838	8,450	2,007	800	11,257	3,248	13,990
	Total rev. (\$000) year 2	1,409	1,010		2,419	-	2,148	5,702	1,603	909	8,214	2,419	10,633	7,111	2,613	909	10,633	2,419	12,781	-	13		13	314	327	7,111	2,626	909	10,647	2,733	13,108
13	Total rev. (\$000) year 3	1,193	1,366		2,559	-	2,559	5,714	1,648	989	8,351	2,419	10,770	6,906	3,014	989	10,910	2,419	13,329	-	13		13	345	358	6,906	3,028	989	10,923	2,764	13,687
14	Total rev. (\$000) year 4	1,208	1,472		2,680	-	680	5,714	1,648	1,013	8,375	2,419	10,794	6,921	3,121	1,013	11,055	2,419	13,474	-	13		13	391	404	6,921	3,134	1,013	11,068	2,810	13,879
15	Total rev. (\$000) year 5	1,208	1,492		2,699	-	199	5,714	1,648	1,013	8,375	2,419	10,794	6,921	3,140	1,013	11,074	2,419	13,494	-	13		13	391	404	6,921	3,153	1,013	11,068	2,810	13,898
16	3																														
	Average rate (m³) year 1	30,06	30.01		30.05		23.66	18.68	9.22	6.95	13.94	11.77	13.41	20.55	10.67	6.95	15.76	11.77	14.31		19.17	-	19.17	2.52	2.54	20.55	10.69	6.95	15.76	6.07	11.20
	Average rate (m³) year 2	38,88	26.15		32.31		28.68	19.49	9.08	7.54	13.93	11.77	13.37	21.63	12.14	7.54	16.00	11.77	14.69		17.93		17.93	2.41	2.50	21.63	12.16	7.54	16.00	8.14	13.09
	Average rate (m³) year 3	34,12	26.19		29.37		29.37	19.53	9.15	7.92	13.97	11.77	13.41	21.09	12.98	7.92	15.93	11.77	14.97		17.93		17.93	2.44	2.52	21.09	12.99	7.92	15.93	7.97	13.26
	Average rate (m³) year 4	37,76	25.20		29.65		29.65	19.53	9.15	8.02	13.98	11.77	13.42	21,32	13.08	8.02	16.04	11.77	15.06		17.93		17.93	2.46	2.53	21.32	13.10	8.02	16.04	7.71	13.16
21	Average rate (m³) year 5	39,38	24.84		29.76		29.76	19.53	9.15	8.02	13.98	11.77	13.42	21.41	13.07	8.02	16.06	11.77	15.07		17.93		17.93	2.46	2.53	21.41	13.09	8.02	16.06	7.71	13.18

2011-2012 DEVELOPMENT PLAN

									LOWAND	MEDIUM O	UTPUT (LMC	D)								LARGEC	ORPORATI	ONS					TOTA	L		
Lin Description			RESIDE	ENTIAL					BUSIN	IESS				TOTAL	LMO															
		New	Sales					New	Sales					New S	ales					New S	Sales					New S	ales			
	On system	Extension projects	Projects >\$1.5 M	Total "	Additional loads	Total	On system	Extension projects	>\$1.5 M	Total	Additional loads	Total	On system	Extension projects	>\$1.5 M	Total	Additional loads	Total	On system	Extension projects	Extension >\$1.5 M	Total	Additional loads	Total	On system	Extension projects	Extension >\$1.5 M	Total	Additional loads	Total
1 Number of customers, year 1	1,897	1,411	-	3,308	233	3,541	1,976	305	-	2,281	627	2,908	3,873	1,716	-	5,589	860	6,449	-	4	-	4	12	16	3,873	1,720	-	5,593	872	6,465
Number of customers, year 2 (cumulative)	2,072	2,733	-	4,805	233	5,038	1,849	350	-	2,199	627	2,826	3,921	3,083	-	7,004	860	7,864	-	3	-	3	9	12	3,921	3,086	-	7,007	869	7,876
Number of customers, year 3 (cumulative)	2,166	3,677	-	5,843	233	6,076	1,849	363	-	2,212	627	2,839	4,015	4,040	-	8,055	860	8,915	-	2	-	2	9	11	4,015	4,042	-	8,057	869	8,926
Number of customers, year 4 (cumulative)	2,166	3,812	-	5,978	233	6,211	1,849	372	-	2,221	627	2,848	4,015	4,184	-	8,199	860	9,059	-	2	-	2	9	11	4,015	4,186	-	8,201	869	9,070
Number of customers, year 5 (cumulative)	2,166	3,812	-	5,978	232	6,211	1,849	373	-	2,222	627	2,849	4,015	4,185	-	8,200	860	9,060	-	2	-	2	9	11	4,015	4,187	-	8,202	869	9,071
6 Volumes (10 ³ m ³), year 1	9,424	1,574	-	10,999	202	11,200	42,655	14,885	-	57,540	20,149	77,689	52,079	16,459	-	68,538	20,351	88,889	-	49,424	-	49,424	61,514	110,938	52,079	65,883	-	117,962	81,864	199,827
7 Volumes (10 ³ m ³), year 2 (cumulative)	7,414	3,466	-	10,880	202	11,082	35,205	16,443	-	51,648	20,149	71,797	42,619	19,910	-	62,529	20,351	82,879	-	23,500	-	23,500	20,602	44,102	42,619	43,410	-	86,029	40,952	126,981
8 Volumes (10 ³ m ³), year 3 (cumulative)	7,817	4,961	-	12,778	202	12,980	35,205	16,995	-	52,200	20,149	72,349	43,023	21,955	-	64,978	20,351	85,329	-	15,000	-	15,000	20,602	35,602	43,023	36,955	-	79,978	40,952	120,931
9 Volumes (10 ³ m ³), year 4 (cumulative)	7,903	5,766	-	13,669	202	13,871	35,205	17,235	-	52,440	20,149	72,589	43,108	23,001	-	66,110	20,351	86,460	-	15,000	-	15,000	20,602	35,602	43,108	38,001	-	81,110	40,952	122,062
Volumes (10 ³ m ³), year 5 (cumulative)	7,903	5,955	-	13,858	202	14,060	35,205	17,283	-	52,489	20,149	72,637	43,108	23,238	-	66,347	20,351	86,697	-	15,000	-	15,000	20,602	35,602	43,108	38,238	-	81,347	40,952	122,299
11 Total rev. (\$000) year 1	1,933	426		2,359	59	2,418	6,715	1,811	-	8,526	2,373	10,899	8,648	2,237	-	10,885	2,432	13,317	-	1,168		1,168	1,533	2,702	8,648	3,405	-	12,053	3,965	16,018
12 Total rev. (\$000) year 2	1,685	1,062		2,748	59	2,807	5,905	1,880	-	7,785	2,373	10,158	7,591	2,942	-	10,533	2,432	12,965	-	612		612	445	1,058	7,591	3,555	-	11,145	2,877	14,023
13 Total rev. (\$000) year 3	1,788	1,576		3,364	59	3,423	5,905	1,942	-	7.847	2,373	10,220	7,693	3,518	-	11,211	2,432	13,643	-	255		255	445	700	7,693	3,773	-	11,466	2,877	14,343
14 Total rev. (\$000) year 4	1,811	1,834		3,645	59	3,704	5,905	1,987	-	7,893	2,373	10,266	7,717	3,821	-	11,538	2,432	13,970	-	255		255	445	700	7,717	4,076	-	11,793	2,877	14,670
15 Total rev. (\$000) year 5	1,811	1,879	-	3,691	59	3,750	5,905	1,993	-	7,899	2,373	10,272	7,717	3,873	-	11,590	2,432	14,022	-	255	-	255	445	700	7,717	4,128	-	11,845	2,877	14,722
16																														1
17 Average rate (m³) year 1	20.51	27.06		21.45	29.21	21.59	15.74	12.17		14.82	11.78	14.03	16.60	13.59		15.88	11.95	14.98		2.36		2.36	2.49	2.44	16.60	5.17		10.22	4.84	8.02
18 Average rate (m³) year 2	22.73	30.65		25.25	29.21	25.32	16.77	11.43		15.07	11.78	14.15	17.81	14.78		16.84	11.95	15.64		2.61		2.61	2.16	2.40	17.81	8.19		12.96	7.03	11.04
19 Average rate (m³) year 3	22.87	31.77		26.33	29.21	26.37	16.77	11.42		15.03	11.78	14.13	17.88	16.02		17.25	11.95	15.99		1.70		1.70	2.16	1.97	17.88	10.21		14.34	7.03	11.86
20 Average rate (m³) year 4	22.92	31.80		26.66	29.21	26.70	16.77	11.53		15.05	11.78	14.14	17.90	16.61		17.45	11.95	16.16		1.70		1.70	2.16	1.97	17.90	10.73		14.54	7.03	12.02
21 Average rate (m ³) year 5	22.92	31.56		26.63	29.21	26.67	16.77	11.53		15.05	11.78	14.14	17.90	16.67		17.47	11.95	16.17		1.70		1.70	2.16	1.97	17.90	10.79		14.56	7.03	12.04

2012-2013 DEVELOPMENT PLAN

									LOWAND	MEDIUM O	UTPUT (LMC	D)								LARGE	CORPORATIO	ONS					TOTAL			
Lin e Description			RESIDE	ENTIAL					BUSIN	IESS				TOTAL	LMO															
		New	Sales					New:	Sales					NewS	ales				I	New	Sales					New	Sales			
	On system	Extension projects	Projects >\$1.5 M	Total "	Additional loads	Total	On system	Extension projects	>\$1.5 M	Total	Additional loads	Total	On system	Extension projects	>\$1.5 M	Total	Additional loads	Total	On system	Extension projects	Extension >\$1.5 M	Total	Additional loads	Total	On system	Extension projects	Extension >\$1.5 M	Total	Additional loads	Total
1 Number of customers, year 1	1,670	801	129	2,600	360	2,960	2025	231	-	2,256	708	2,964	3,695	1,032	129	4,856	1,068	5,924	2	-	1	3	3	6	3,697	1,032	130	4,859	1,071	5,930
Number of customers, year 2 (cumulative)	1,892	1,601	257	3,750	360	4,110	1,899	266	-	2,165	708	2,873	3,791	1,867	257	5,915	1,068	6,983	2	-	1	3	3	6	3,793	1,867	258	5,918	1,071	6,989
Number of customers, year 3 (cumulative)	2,015	2,145	372	4,532	360	4,892	1,899	296	-	2,195	708	2,903	3,914	2,441	372	6,727	1,068	7,795	2	-	1	3	3	6	3,916	2,441	373	6,730	1,071	7,801
Number of customers, year 4 (cumulative)	2,018	2,432	489	4,939	360	5,299	1,899	299	-	2,198	708	2,906	3,917	2,731	489	7,137	1,068	8,205	2	-	1	3	3	6	3,919	2,731	490	7,140	1,071	8,211
Number of customers, year 5 (cumulative)	2018	2,513	489	5,020	360	5,380	1,899	299	-	2,198	708	2,906	3,917	2,812	489	7,218	1,068	8,286	2	-	1	3	3	6	3,919	2,812	490	7,221	1,071	8,292
6 Volumes (10 ³ m ³), year 1	8,260	692	115	9,068	287	9,354	41,590	10,525	-	52,115	21,620	73,735	49,850	11,217	115	61,183	21,907	83,089	2,969	-	27,115	30,084	3,408	33,491	52,819	11,217	27,230	91,266	25,314	116,589
Volumes (10 ³ m ³), year 2	6,469	1,777	313	8,558	287	8,845	33,165	13,003	-	46,167	21,620	67,787	39,634	14,780	313	54,726	21,907	76,632	3,470	_	27,115	30,585	5,013	35,597	43,103	14,780	27,428	85,310	26,919	112,230
(cumulative) Volumes (10 ³ m ³), year 3 (cumulative)	6,847	2,551	467	9,864	287	10,151	33,165	13,284	-	46,449	21,620	68,069	40,012	15,835	467	56,313	21,907	78,220	3,470	-	27,115	30,585	5,013	35,597	43,481	15,835	27,582	86,898	26,919	113,817
Volumes (10 ³ m ³), year 4 (cumulative)	7,147	3,112	613	10,873	287	11,159	33,165	13,893	-	47,057	21,620	68,677	40,312	17,005	613	57,930	21,907	79,837	3,470	-	27,115	30,585	6,711	37,296	43,782	17,005	27,728	88,515	28,618	117,133
Volumes (10 ³ m ³), year 5 (cumulative)	7,266	3,385	688	11,339	287	11,625	33,165	13,893	-	47,057	21,620	68,677	40,431	17,277	688	58,396	21,907	80,302	3,470	-	27,115	30,585	6,711	37,296	43,901	17,277	27,803	88,981	28,618	117,598
11 Total rev. (\$000) year 1	1,744	208	36	1,988	68	2,057	6,721	1,429	-	8,150	2,237	10,387	8,465	1,637	36	10,138	2,305	12,444	89		575	665	97	762	8,555	1,637	611	10,803	2,403	13,205
12 Total rev. (\$000) year 2	1,524	577	101	2,203	68	2,271	5,737	1,598	-	7,335	2,237	9,572	7,262	2,175	101	9,537	2,305	11.843	101		575	676	178	855	7,363	2,175	676	10,214	2,484	12,698
13 Total rev. (\$000) year 3	1,635	866	158	2,659	68	2,727	5,737	1,645	-	7,382	2,237	9,619	7,372	2,511	158	10,040	2,305	12,346	101		575	676	178	855	7,473	2,511	733	10,717	2,484	13,200
14 Total rev. (\$000) year 4	1,697	1,057	211	2,966	68	3,034	5,737	1,692	-	7,429	2,237	9,666	7,434	2,749	211	10,395	2,305	12,700	101		575	676	210	887	7,536	2,749	787	11,071	2,516	13,587
15 Total rev. (\$000) year 5	1,716	1,137	239	3,092	68	3,161	5,737	1,692	-	7,429	2,237	9,666	7,453	2,829	239	10,521	2,305	12,826	101		575	676	210	887	7,554	2,829	814	11,197	2,516	13,713
16																														
17 Average rate (m³) year 1	21.12	30.11	30.82	21.93	23.88	21.99	16.16	13.58		15.64	10.35	14.09	16.98	14.60	30.82	16.57	10.52	14.98	3.01		2.12	2.21	2.85	2.27	16.20	14.60	2.24	11.84	9.49	11.33
18 Average rate (m³) year 2	23.57	32.48	32.33	25.74	23.88	25.68	17.30	12.29		15.89	10.35	14.12	18.32	14.71	32.33	17.43	10.52	15.45	2.92		2.12	2.21	3.56	2.40	17.08	14.71	2.47	11.97	9.23	11.31
19 Average rate (m³) year 3	23.88	33.96	33.77	26.95	23.88	26.87	17.30	12.38		15.89	10.35	14.13	18.42	15.86	33.77	17.83	10.52	15.78	2.92		2.12	2.21	3.56	2.40	17.19	15.86	2.66	12.33	9.23	11.60
20 Average rate (m ³) year 4	23.75	33.97	34.48	27.28	23.88	27.19	17.30	12.18		15.79	10.35	14.07	18.44	16.16	34.48	17.94	10.52	15.91	2.92		2.12	2.21	3.14	2.38	17.21	16.16	2.84	12.51	8.79	11.60
21 Average rate (m³) year 5	23.62	33.61	34.71	27.27	23.88	27.19	17.30	12.18		15.79	10.35	14.07	18.43	16.37	34.71	18.02	10.52	15.97	2.92		2.12	2.21	3.14	2.38	17.21	16.37	2.93	12.58	8.79	11.66

2013-2014 DEVELOPMENT PLAN

			LOW AND MEDIUM OUTPUT (LMO)														LARGE	CORPORATIO	ONS			TOTAL										
Line	Description	RESIDENTIAL						BUSINESS						TOTALLMO																		
		New Sales						New Sales						New Sales						New Sales							New Sales					
		On Extension Projects Total Additional Total system projects \$1.5 M				On system	Extension projects	>\$1.5 M	Total	Additional loads	Total	On system	Extension projects	>\$1.5 M	Total	Additional loads	Total	On system	Extension projects	Extension >\$1.5 M	Total	Additional loads	Total	On system	Extension E	xtension>\$1.5	Total	Additional loads	Total			
1	Number of customers, year 1	1,425	666	-	2,091	294	2,385	2,013	248	-	2,261	795	3,056	3,428	914	-	4,352	1,089	5,441	3	-	1	4	-	4	3,441	914	1	4,356	1,089	5,445	
2	Number of customers, year 2 (cumulative)	1,476	1,276	-	2,752	294	3,046	1,849	287	-	2,136	795	2,931	3,325	1,563	-	4,888	1,089	5,977	3	-	1	4	-	4	3,328	1,563	1	4,892	1,089	5,981	
3	Number of customers, year 3	1,496	1,745	-	3,241	294	3,535	1,849	300	-	2,149	795	2,944	3,345	2,045	-	5,390	1,089	6,479	3	-	1	4	-	4	3,348	2,045	1	5,394	1,089	6,483	
4	(cumulative) Number of customers, year 4	1,496	1,997	-	3,493	294	3,787	1,849	301	-	2,150	795	2,945	3,345	2,298	-	5,643	1,089	6,732	3	-	1	4	-	4	3,348	2,298	1	5,647	1,089	6,736	
5	(cumulative) Number of customers, year 5	1,496	1,997	-	3,493	294	3,787	1,849	301	-	2,150	795	2,945	3,345	2,298	_	5,643	1,089	6,732	3	-	1	4	-	4	3,348	2,298	1	5,647	1,089	6,736	
6	(cumulative) Volumes (10 ³ m ³), year 1	5,896	1,153	-	7,049	239	7,288	43,084	11,450	-	54,534	21,189	75,724	48,980	12,603	_	61,583	21,428	83,011	1,975	-	28,430	30,405	-	30,405	50,955	12,603	28,430	91,988	21,428	113,416	
7	Volumes (10 ³ m ³), year 2	4,220	2,223	-	6,443	239	6,682	30,509	12,802	-	43,311	21,189	64,500	34,729	15,025	_	49,754	21,428	71,182	1,975	-	28,430	30,405	_	30,405	36,704	15,025	28,430	80,159	21,428	101,587	
8	(cumulative) Volumes (10 ³ m ³), year 3	4,307	3,114	_	7,421	239	7,660	30,509	12,961	_	43,470	21,189	64,659	34,815	16,076	_	50,891	21,428	72,319	1,975	-	28,430	30,405	_	30,405	36,790	16,076	28,430	81,296	21,428		
9	(cumulative) Volumes (10 ³ m ³), year 4	4,316	3,689	_	8,005	239	8,244	30,509	12,980	_	43,488	21,189	64,678	34,825	16,669	_	51,494	21,428	72,922	1,975	-	28,430	30,405	-	30,405	36,800	16,669	28,430	81,899	21,428	103,327	
10	(cumulative) Volumes (10 ³ m ³), year 5	4,316	3,854		8,170	239	8,408	30,509	12,980	_	43,488	21,189	64,678	34,825	16,833	_	51,658	21,428	73,086	1,975		28,430	30,405	-	30,405	36,800	16,833	28,430	82,063	21,428	103,491	
11	(cumulative) Total rev. (\$000) year 1	1,571	273		1,844	87	1,931	7,804	1,641		9,445	3,044	12,489	9,374	1,914	_	11,289	3,131	14,419	196	_	1,011	1,207	_	1,207	9,571	1,914	1,011	12,496	3,131	15,626	
	Total revenues (\$000) year 2	1,304	640	_	1,944	87	2,031	6,347	1,693		8,040	3,044	11,084	7,651	2,333		9,984	3,131	13,115	180		1,011	1,191	_	1,191	7,831	2,333	1,011	11,176	3,131	14,306	
	Total revenues (\$000) year 3	1,338	945	-	2,282	87	2,369	6,347	1,737		8,084	·	11,128	7,685	2,681		10,366	3,131	13,497	180		1,011	1,191	_	1,191	7,865	2,681	1,011	11,558	3,131	14,688	
	, , ,	1,342	1.140	-	2,483	87	2,570	6,347	1,737		·	3,044	11,133	,			10,566	3,131	13,702		-	1,011	1,191		1,191	7,870	2,882		11,763	3,131	14,893	
	Total revenues (\$000) year 4	·	, -	-					,		8,089	3,044	,	7,690	2,882	-			,	180	-	,	·	-	, -	,		1,011		3,131		
15	Total revenues (\$000) year 5	1,342	1,202	-	2,545	87	2,632	6,347	1,741		8,089	3,044	11,133	7,690	2,944	-	10,633	3,131	13,764	180	-	1,011	1,191	-	1,191	7,870	2,944	1,011	11,825	3,131	14,956	
16																														14.61	l	
	Average rate (m³) year 1	26.64	23.69		26.16		26.50	18.11	14.33		17.32	14.37	16.49	19.14	15.19		18.33	14.61	17.37	9.93		3.56	3.97		3.97	18.78	15.19	3.56	13.58		13.78	
	Average rate (m ³) year 2	30.90	28.81		30.18		30.40	20.80	13.22		18.56	14.37	17.18	22.03	15.53		20.07	14.61	18,42	9.13		3.56	3.92		3.92	21.34	15.53	3.56	13.94	14.61	14.08	
	Average rate (m³) year 3	31.06	30.33		30.76		30.93	20.80	13.40		18.60	14.37	17.21	22.07	16.68		20.37	14.61	18.66	9.13		3.56	3.92		3.92	21.38	16.68	3.56	14.22	14.61	14.30	
	Average rate (m ³) year 4	31.10	30.90		31.01	36.42	31.17	20.80	13.42		18.60	14.37	17.21	22.08	17.29		20.53	14.61	18.79	9.13		3.56	3.92		3.92	21.39	17.29	3.56	14.36	14.61	14.41	
21	Average rate (m ³) year 5	31.10	31.20		31.15	36.42	31.30	20.80	13.42		18.60	14.37	17.21	22.08	17.49		20.58	14.61	18.83	9.13		3.56	3.92		3.92	21.39	17.49	3.56	14.41	14.61	14.45	

2014-2015 DEVELOPMENT PLAN

			LOW AND MEDIUM OUTPUT (LMO)															LARGEC	ORPORATIO	NS			TOTAL								
Line	Description			RESID	ENTIAL			BUSINESS						TOTALLMO																	
		New Sales				New Sales						New Sales						New Sales						New Sales							
		On system	Extension projects	Projects >\$1.5 M	Total	Additional loads	Total	On system	Extension projects	>\$1.5 M	Total	Additional loads	Total	On system	Extension projects	>\$1.5M	Total	Additional loads	Total	On system	Extension projects	Extension >\$1.5 M	Total	Additional loads	Total	On system	Extension projects	Extension >\$1.5 M	Total	Additional loads	Total
		ĺ			1	1			· ′	I				,		I		<u> </u>		.,	1	, -		- I				П		Ι Ι	
1	Number of customers, year 1 Number of customers, year 2	1,294	448	-	1,742	162	1,904	1,984	288	40	2,312	904	3,216	3,278	736	40	4,054	1,066	5,120	-	1	-	1	7	8	3,278	737	40	4,055	1,073	5,128
2	(cumulative)	1,267	766	-	2,033	162	2,195	1,823	341	72	2,236	904	3,140	3,090	1,107	72	4,269	1,066	5,335	-	1	-	1	6	7	3,090	1,108	72	4,270	1,072	5,342
3	Number of customers, year 3 (cumulative)	1,293	1,041	-	2,334	162	2,496	1,823	345	91	2,259	904	3,163	3,116	1,386	91	4,593	1,066	5,659	-	1	-	1	6	7	3,116	1,387	91	4,594	1,072	5,666
4	Number of customers, year 4 (cumulative)	1,293	1,189	-	2,482	162	2,644	1,823	347	95	2,265	904	3,169	3,116	1,536	95	4,747	1,066	5,813	-	1	-	1	6	7	3,116	1,537	95	4,748	1,072	5,820
5	Number of customers, year 5 (cumulative)	1,293	1,258	-	2,551	162	2,713	1,823	347	97	2,267	904	3,171	3,116	1,605	97	4,818	1,066	5,884	-	1	-	1	6	7	3,116	1,606	97	4,819	1,072	5,891
6	Volumes (10 ³ m ³), year 1	6,821	771	-	7,592	174	7,765	34,205	19,461	5,465	59,131	21,549	80,680	41,026	20,232	5,465	66,723	21,722	88,445	-	85		85	9,324	9,409	41,026	20,317	5,465	66,808	31,047	97,855
7	Volumes (10 ³ m ³), year 2 (cumulative)	4,675	1,740	-	6,415	174	6,589	25,070	21,526	6,865	53,462	21,549	75,010	29,745	23,266	6,865	59,877	21,722	81,599	-	2,640	-	2,640	6,324	8,964	29,745	25,906	6,865	62,517	28,047	90,563
8	Volumes (10 ³ m ³), year 3 (cumulative)	4,709	2,378	-	7,086	174	7,260	25,070	22,236	7,232	54,538	21,549	76,087	29,779	24,613	7,232	61,624	21,722	83,347	-	2,640	-	2,640	6,324	8,964	29,779	27,253	7,232	64,264	28,047	92,311
9	Volumes (10 ³ m ³), year 4 (cumulative)	4,791	3,012	-	7,803	174	7,977	25,070	23,338	7,317	55,725	21,549	77,274	29,861	26,350	7,317	63,528	21,722	85,251	-	2,640	-	2,640	6,324	8,964	29,861	28,990	7,317	66,168	28,047	94,215
10	Volumes (10 ³ m ³), year 5 (cumulative)	4,793	3,300	-	8,093	174	8,267	25,070	23,981	7,390	56,441	21,549	77,990	29,864	27,281	7,390	64,535	21,722	86,257	-	2,640	-	2,640	6,324	8,964	29,864	29,921	7,390	67,175	28,047	95,222
11	Total rev. (\$000) year 1	1,621	205	-	1,826	58	1,884	6,434	2,284	670	9,387	2,938	12,326	8,055	2,488	670	11,213	2,996	14,209	(0)	14		14	487	501	8055	2,503	670	11,227	3,483	14,710
12	Total revenues (\$000) year 2	1,279	496	-	1,775	58	1,833	5,356	2,429	794	8,578	2,938	11,517	6,635	2,925	794	10,354	2,996	13,350	(0)	214		214	255	469	6,635	3,139	794	10,568	3,251	13,819
	Total revenues (\$000) year 3	1,294	709	_	2,003	58	2,061	5,356	2,373	845	8,574	2,938	11,512	6,649	3,082	845	10,576	2,996	13,572	(0)	214		214	255	469	6,649	3,296	845	10,790	3,251	14,042
	Total revenues (\$000) year 4	1,313	886	_	2,199	58	2,257	5,356	2,469	863	8,687	2,938	11,625	6,669	3,354	863	10,886	2,996	13,882	(0)	214		214	255	469	6,669	3,568	863	11,100	3,251	14,351
			978		2,288	58	2,345					2,938	11,596			876			13,941		214		214	255	469	6,665		876	11,159		14,410
15	Total revenues (\$000) year 5	1,310	976	-	2,200	36	2,345	5,356	2,426	876	8,658	2,938	11,596	6,665	3,404	876	10,945	2,996	13,941	(0)	214		214	255	409	0,000	3,618	876	11,159	0,201	14,410
16	A (3)	00 ==		-	04.0-	00.05	0.4.05	40.5.		40.0=	45.05	40.0	45.55	40.05	10.55	40.0=	40.5	10.75	40.5=		40 = -		40.71			40.05	40.53	40.5-	40.5	11 22	45.05
	Average rate (m³) year 1	23.77	26.58	-	24.05	33.26	24.26	18.81	11.73	12.25	15.88	13.64	15.28	19.63	12.30	12.25	16.81	13,79	16.07		16.74		16.74	5.22	5.32	19.63	12.32	12.25	16.81	11.22	15.03
	Average rate (m³) year 2	27.36	28.52	-	27.67	33.26	27.82	21.36	11.28	11.57	16.05	13.64	15.35	22.30	12.57	11.57	17.29	13.79	16.36		8.10		8.10	4.04	5.23	22.30	12.12	11.57	16.90	11.59	15.26
19	Average rate (m³) year 3	27.48	29.82	-	28.26	33.26	28.38	21.36	10.67	11.68	15.72	13.64	15.13	22.33	12.52	11.68	17.16	13.79	16.28		8.10		8.10	4.04	5.23	22.33	12.09	11.68	16.79	11.59	15.21
20	Average rate (m ³) year 4	27.41	29.41	-	28.18	33.26	28.29	21.36	10.58	11.79	15.59	13.64	15.04	22.33	12.73	11.79	17.14	13.79	16.28		8.10		8.10	4.04	5.23	22.33	12.31	11.79	16.77	11.59	15.23
21	Average rate (m ³) year 5	27.33	29.62	-	28.26	33.26	28.37	21.36	10.12	11.85	15.34	13.64	14.87	22.32	12.48	11.85	16.96	13.79	16.16		8.10		8.10	4.04	5.23	22.32	12.09	11.85	16.61	11.59	15.13

2015-2016 DEVELOPMENT PLAN

		LOW AND MEDIUM OUTPUT (LMO)														LARGE	CORPORATIO	ONS			TOTAL												
Line Description			RESID	ENTIAL			BUSINESS						TOTALLMO																				
	New Sales						New Sales						New Sales							Sales			NewSales										
	On system					Total	On system	Extension projects	>\$1.5M	Total	Additional loads	Total	On system	Extension projects	>\$1.5 M	Total	Additional loads	Total	On system	Extension projects	Extension >\$1.5 M	Total	Additional loads	Total	On system	Extension projects	Extension >\$1.5 M	Total	Additional loads	Total			
1 Number of customers, year 1	1,098	349	-	1,447	164	1,611	1,921	184	12	2,117	971	3,088	3,019	533	12	3,564	1,135	4,699	-	-	-	-	2	2	3,019	533	12	3,564	1,137	4,701			
Number of customers, year 2 (cumulative)	1,081	665	-	1,746	164	1,911	1,781	210	25	2,015	971	2,986	2,863	875	25	3,762	1,135	4,897	-	-	-	-	2	2	2,863	875	25	3,762	1,137	4,899			
Number of customers, year 3 (cumulative)	1,108	916	-	2,024	164	2,188	1,783	212	28	2,022	971	2,993	2,891	1,127	28	4,046	1,135	5,181	-	-	-	-	2	2	2,891	1,127	28	4,046	1,137	5,183			
Number of customers, year 4 (cumulative)	1,123	1,074	-	2,197	164	2,361	1,785	214	28	2,026	971	2,997	2,908	1,288	28	4,223	1,135	5,358	-	-	-	-	2	2	2,908	1,288	28	4,223	1,137	5,360			
Number of customers, year 5 (cumulative)	1,123	1,195	-	2,318	164	2,482	1,787	217	28	2,031	971	3,002	2,910	1,411	28	4,349	1,135	5,484	-	-	-	-	2	2	2,910	1,411	28	4,349	1,137	5,486			
6 Volumes (10 ³ m ³), year 1	5,419	589	-	6,007	147	6,154	33,306	11,354	147	44,807	24,357	69,164	38,725	11,943	147	50,814	24,504	75,318	-	-	-	-	220	220	38,725	11,943	147	50,814	24,723	75,538			
7 Volumes (10 ³ m ³), year 2 (cumulative)	3,637	1,432	-	5,068	147	5,215	26,659	11,913	290	38,862	24,357	63,220	30,296	13,344	290	43,931	24,504	68,435	-	-	-	-	220	220	30,296	13,344	290	43,931	24,723	68,654			
Volumes (10 ³ m ³), year 3 (cumulative)	3,912	2,101	-	6,013	147	6,160	26,998	12,832	315	40,145	24,357	64,503	30,910	14,933	315	46,159	24,504	70,662	-	-	-	-	220	220	30,910	14,933	315	46,159	24,723	70,882			
Volumes (10 ³ m ³), year 4 (cumulative)	4,142	2,584	-	6,727	147	6,873	27,107	13,019	315	40,441	24,357	64,798	31,250	15,603	315	47,168	24,504	71,672	-	-	-	-	220	220	31,250	15,603	315	47,168	24,723	71,892			
Volumes (10 ³ m ³), year 5 (cumulative)	4,151	2,584	-	7,005	147	7,152	27,218	13,121	315	40,654	24,357	65,011	31,369	15,975	315	47,659	24,504	72,163	-	-	-	-	220	220	31,369	15,975	315	47,659	24,723	72,383			
11 Total rev. (\$000) year 1	1,222	155		1,377	44	1,421	6,241	1,184	35	7,461	3,300	10,761	7,464	1,339	35	8,838	3,345	12,182	-	-	-	-	4	4	7,464	1,339	35	8,838	3,349	12,186			
12 Total rev. (\$000) year 2	972	399		1,372	44	1,416	5,336	1,275	70	6,681	3,300	9,981	6,309	1,674	70	8,053	3,345	11,397	-	-	-	-	24	24	6,309	1,674	70	8,053	3,368	11,421			
13 Total rev. (\$000) year 3	1,027	599		1,626	44	1,671	5,394	1,349	77	6,819	3,300	10,120	6,421	1,948	77	8,446	3,345	11,791	-	-	-	-	24	24	6,421	1,948	77	8,446	3,368	11,814			
14 Total rev. (\$000) year 4	1,061	746		1,807	44	1,851	5,415	1,368	77	6,859	3,300	10,159	6,476	2,114	77	8,666	3,345	12,011	-	-	-	-	24	24	6,476	2,114	77	8,666	3,368	12,034			
15 Total rev. (\$000) year 5	1,064	836		1,900	44	1,944	5,437	1,384	77	6,897	3,300	10,197	6,501	2,219	77	8,797	3,345	12,142	-	-	-	-	24	24	6,501	2,219	77	8,797	3,368	12,165			
16																														-			
17 Average rate (m³) year 1	22.56	26.25		22.92	30.32	23.10	18.74	10.43	23.96	16.65	13.55	15.56	19.27	11.21	23.96	17.39	13.65	16.17					1.78	1.78	19.27	11.21	23.96	17.39	13.54	16.13			
18 Average rate (m3) year 2	26.74	27.88		27.06	30.32	27.15	20.02	10.70	24.11	17.19	13.55	15.79	20.82	12.54	24.11	18.33	13.65	16.65					10.73	10.73	20.82	12.54	24.11	18.33	13.62	16.64			
19 Average rate (m3) year 3	26.25	28.52		27.05	30.32	27.12	19.98	10.51	24.29	16.99	13.55	15.69	20.77	13.04	24.29	18.30	13.65	16.69					10.73	10.73	20.77	13.04	24.29	18.30	13.62	16.67			
20 Average rate (m3) year 4	25.61	28.87		26.86	30.32	26.93	19.98	10.50	24.29	16.96	13.55	15.68	20.72	13.55	24.29	18.37	13.65	16.76					10.73	10.73	20.72	13.55	24.29	18.37	13.62	16.74			
21 Average rate (m3) year 5	25.64	29.28		27.12	30.32	27.19	19.97	10.55	24.29	16.96	13.55	15.69	20.72	13.89	24.29	18.46	13.65	16.83					10.73	10.73	20.72	13.89	24.29	18.46	13.62	16.81			