

RESPONSE OF GAZ MÉTRO LIMITED PARTNERSHIP (GAZ MÉTRO)
TO REQUEST FOR INFORMATION NO. 5 OF THE RÉGIE DE L'ÉNERGIE (RÉGIE)
PRESENTED TO GAZ METRO REGARDING THE APPLICATION RELATING TO THE
ALLOCATION OF COSTS AND THE RATE STRUCTURE

Demande B-0196 / #95171297

- 1. References:** (i) Exhibit B-0145 , p. 9;
(ii) Exhibit B-0145 , p. 10;
(iii) Exhibit B-0145 , p. 11.

Preamble:

(i)

Table 2 Residential Marginal Operating Expenses

Description	Gaz Metro As Proposed				Black & Veatch Revised			
	Residential		Year 2 and *		Residential		Year 2 and *	
	Min. 1	Max.	Min. 1	Max.	Min. 1	Max.	Min. 1	Max.
Mailing of subscription confirmation letter	\$0.83	\$0.83	\$0.00	\$0.00	\$0.83	\$0.83	\$0.00	\$0.00
Gist of mailing bill	\$8.36	\$8.36	\$8.36	\$8.36	\$8.36	\$8.36	\$8.36	\$8.36
Gist of opening a billing file	\$9.66	\$9.66	\$0.00	\$0.00	\$9.66	\$9.66	\$0.00	\$0.00
4 Cost of reading a meter	\$6.71	\$6.71	\$6.71	\$6.71	\$0.00	\$0.00	\$0.00	\$0.00
Input of a new contract	\$36.29	\$36.29	\$0.00	\$0.00	\$36.29	\$36.29	\$0.00	\$0.00
Cost of a credit check conducted Internally	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Annual cost for cashing a payment	\$0.74	\$0.74	\$0.74	\$0.74	\$0.74	\$0.74	\$0.74	\$0.74
Cost of processing a standard customer call	\$12.84	\$12.84	\$12.84	\$12.84	\$0.00	\$12.84	\$0.00	\$12.84
Cost of Bad Debts	\$0.57	\$0.57	\$0.57	\$0.57	\$0.00	\$0.00	\$0.00	\$0.00
10 Collection and recovery costs	\$2.43	\$2.43	\$2.43	\$2.43	\$0.00	\$0.00	\$0.00	\$0.00
11 Customer retention costs - Major accounts	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
12 Customer retention costs - Major industries	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
13 Preventive maintenance - Service line	\$12.88	\$12.88	\$12.88	\$12.88	\$0.00	\$0.00	\$0.00	\$12.88
14 Corrective maintenance Service line	\$17.99	\$17.99	\$17.99	\$17.99	\$0.00	\$0.00	\$0.00	\$17.99
15 Processing of CRP application	\$0.00	\$23.83	\$0.00	\$0.00	\$0.00	\$23.83	\$0.00	\$0.00
16 Preventive maintenance - Mains \$0.22/m								
17 Corrective maintenance - Mains \$0.37/m								
18 Meters inspection and maintenance costs								
19 Type of meters								
20 Turbine	\$0.00	\$31.68	\$0.00	\$31.68	\$0.00	\$31.68	\$0.00	\$31.68
21 Spin test for turbine (less than 12 in)	\$0.00	\$79.20	\$0.00	\$79.20	\$0.00	\$79.20	\$0.00	\$79.20
22 Telemetry	\$0.00	\$118.79	\$0.00	\$118.79	\$0.00	\$118.79	\$0.00	\$118.79
23 Corrective instruments	\$0.00	\$87.11	\$0.00	\$87.11	\$0.00	\$87.11	\$0.00	\$87.11
24 Spin test for turbine (12 in and more)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
25 Cost of a cellular line - telemetry	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
26 Total	\$109.30	\$449.91	\$62.52	\$379.31	\$55.88	\$409.33	\$9.10	\$369.60

(ii)

Table 3 C/I Marginal Operating Expenses

Line Description	Gaz Metro As Proposed				Black & Veatch Revised			
	CM		C/I		C/I		C/I	
	Year 1	Year 2 and *	Year 1	Year 2 and *	Year 1	Year 2 and *	Year 1	Year 2 and *
Mailing of subscription confirmation letter	\$0.83	\$0.83	\$0.00	\$0.00	\$0.83	\$0.83	\$0.00	\$0.00
Cost of mailing bill	\$8.36	\$8.36	\$8.36	\$8.36	\$8.36	\$8.36	\$8.36	\$8.36
Cost of opening a billing file	\$9.66	\$9.66	\$0.00	\$0.00	\$9.66	\$9.66	\$0.00	\$0.00
4 Cost of reading a meter	\$6.71	\$6.71	\$6.71	\$6.71	\$0.00	\$0.00	\$0.00	\$0.00
Input of a new contract	\$52.62	\$52.62	\$0.00	\$0.00	\$52.62	\$52.62	\$0.00	\$0.00
Cost of a credit check conducted	\$17.19	\$17.19	\$0.00	\$0.00	\$17.19	\$17.19	\$0.00	\$0.00
Annual cost for cashing a payment	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75
Cost of proceeding a standard	\$12.84	\$12.84	\$12.84	\$12.84	\$0.00	\$12.84	\$0.00	\$12.84
Cost of Bad Debts	\$7.77	\$7.77	\$7.77	\$7.77	\$0.00	\$0.00	\$0.00	\$0.00
10 Collection and recovery costs	\$33.31	\$33.31	\$33.31	\$33.31	\$0.00	\$0.00	\$0.00	\$0.00

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11	Customer retention costs - Major	\$0.00	\$39.05	\$0.00	\$39.05	s0.00j	s0.00j	s0.00j	\$0.00
12	Customer retention costs • Major	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
13	Preventive maintenance Service line	\$12.88	\$12.88	\$12.88	\$12.88	\$0.00	\$0.00	\$0.00	\$12.88
14	Corrective maintenance - Service line	\$17.99	\$17.99	\$17.99	\$17.99	\$0.00	\$0.00	\$0.00	\$17.99
15	Processing of CRP application	\$0.00	\$32.90	\$0.00	\$0.00	\$0.00	\$32.90	\$0.00	\$0.00
16	Preventive maintenance - Mains \$0^/m								
17	Corrective maintenance - Mains \$037/m								
18	Meters inspection and maintenance								
19	Type of meters								
20	Turbine	\$0.00	\$31.68	\$0.00	\$31.68	\$0.00	\$31.68	\$0.00	\$31.68
21	Spin test for turbine (less than 12 in)	\$0.00	\$79.20	\$0.00	\$79.20	\$0.00	\$79.20	\$0.00	\$79.20
22	Telemetry	\$0.00	\$118.79	\$0.00	\$118.79	\$0.00	\$118.79	\$0.00	\$118.79
23	Corrective instruments	\$0.00	\$87.11	\$0.00	\$87.11	\$0.00	\$87.11	\$0.00	\$87.11
24	Spin test for turbine (12 in and more)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
25	Cost of a cellular line - telemetry	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

(iii)

Table 4 Major Industries Marginal Operating Expenses

1	Mailing of subscription confirmation letter	\$0.83	\$0.83	\$0.00	\$0.00	\$0.83	\$0.83	\$0.00	\$0.00
2	Cost of mailing bill	\$8.36	\$8.36	\$8.36	\$8.36	\$8.36	\$8.36	\$8.36	\$8.36
3	Cost of opening a billing file	\$9.66	\$9.66	\$0.00	\$0.00	\$9.66	\$9.66	\$0.00	\$0.00
4	Cost of reading a meter	\$6.71	\$6.71	\$6.71	\$6.71	\$0.00	\$0.00	\$0.00	\$0.00
5	Input of a new contract	\$36.29	\$36.29	\$0.00	\$0.00	\$36.29	\$36.29	\$0.00	\$0.00
6	Cost of a credit check conducted Internally	\$17.19	\$17.19	\$0.00	\$0.00	\$17.19	\$17.19	\$0.00	\$0.00
7	Annual cost for cashing a payment	\$1.59	\$1.59	\$1.59	\$1.59	\$1.59	\$1.59	\$1.59	\$1.59
8	Cost of proceeding a standard customer call	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
9	Cost of Bad Debts	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
10	Collection and recovery costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
11	Customer retention costs • Major accounts	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
12	Customer retention costs • Major industries	\$1,197.16	\$1,197.16	\$1,197.16	\$1,197.16	\$0.00	\$0.00	\$0.00	\$0.00
13	Preventive maintenance - Service Line	\$12.88	\$12.88	\$12.88	\$12.88	\$0.00	\$0.00	\$0.00	\$12.88
14	Corrective maintenance • Service line	\$17.99	\$17.99	\$17.99	\$17.99	\$0.00	\$0.00	\$0.00	\$17.99
15	Processing of CRP application	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
16	Preventive maintenance-Mains	\$0.22/m							
17	Corrective maintenance - Mains	\$a37/m							
18	Meters Inspection and maintenance costs								
19	Type of meters								
20	Turbine	\$31.68	\$31.68	\$31.68	\$31.68	\$31.68	\$31.68	\$31.68	\$31.68
21	Spin test for turbine (less than 12 in)	\$79.20	\$0.00	\$79.20	\$0.00	\$79.20	\$0.00	\$79.20	\$0.00
22	Telemetry	\$118.79	\$118.79	\$118.79	\$118.79	\$118.79	\$118.79	\$118.79	\$118.79
23	Corrective instruments	\$87.11	\$87.11	\$87.11	\$87.11	\$87.11	\$87.11	\$87.11	\$87.11
24	Spin test for turbine (12 in and more)	\$0.00	\$237.59	\$0.00	\$237.59	\$0.00	\$237.59	\$0.00	\$237.59
25	Cost of a cellular line - telemetry	\$0.00	\$186.12	\$0.00	\$186.12	\$0.00	\$186.12	\$0.00	\$186.12
26	Total	\$1,625.45	\$1,969.96	\$1,561.48	\$1,905.99	\$390.70	\$735.21	\$326.74	\$702.12

Questions:

1.1 Please explain how Gaz Métro established the marginal costs of long-term service delivery for each of the items in the column "Gaz Metro As proposed" ("Year 1" and "Year 2 and + ") for the residential, CII and Major Industries markets (references (i) to (iii)).

Response:

A table describing the methodology used to establish each of the costs presented in the tables presented in references (i) to (iii) is provided in Schedule 1.

What is more, it is important to make certain specifications as to the method that would be used in the context of Gaz Métro's initial proposal. Gaz Métro's study allowed it to understand that the characteristics of the new customers contemplated by a profitability analysis, owing to their nature and needs, will influence the activities that Gaz Métro will need to offer them. These characteristics are:

- market type;
- meter type;
- rebate consumption program (RCP) application;
- addition of a cellular line; and
- number of meters of pipes.

What is more, when establishing the minimum and maximum limits, certain hypotheses were used

for different markets.

- Although the meters that have the highest inspection cost are those for turbines that are bigger than 12 inches, the maximum presented by Gaz Métro in the table for residential and CII markets is a turbine of less than 12 inches, seeing as it is highly unlikely that a customer of these markets would consume a sufficient volume to justify the installation of a larger format turbine.
- The costs associated with the addition of a cellular line only applies for the maximum established for the Major Industries market. Such lines are only installed on the rare occasions where the distance between the meter's location and the customer's telephone line is too great. Only Major Industries customers find themselves in this situation.

It bears noting that the costs of each of these characteristics, in accordance with the method proposed by Black & Veatch, is presented in the table of Schedule 2.

Finally, the profitability analysis of a project would be carried out based on the method proposed by Black & Veatch; each of the characteristics selected would be associated with a minimum cost unless the specific characteristics of the new customer require that the maximum limit be used, and the sum of these costs would be used as the marginal cost of long-term service delivery for this project. Consequently, each profitability analysis would be carried out using a marginal cost reflecting the characteristics specific to the new customer.

- 1.2 Please explain whether the service costs associated with the GEEP's energy efficiency programs of are included in the method that was proposed by Gaz Métro for the new customers (references (i) to (iii): "*Gaz Metro As Proposed*") and for load additions.

Response:

The GEEP's energy efficiency programs are not included in the initial proposal examination process, contrary to the rebate consumption program (RCP) that is an integral part of the analysis leading to the establishment of the terms and conditions of the agreement proposed to a potential customer. The GEEP-related costs are therefore not considered in the profitability analysis of new customers and of load additions. Indeed, energy efficiency programs already undergo their own profitability analysis, the total resource cost test (TRCT), which notably takes into account the total costs of programs (including administrative costs), as well as costs avoided. Consequently, the costs of the GEEP's energy efficiency programs are not factored into the method proposed by Gaz Métro to establish the marginal costs of long-term service delivery.

- 1.3 Please explain whether the service costs associated with the subsidies under the *Compte d'aide à la substitution d'énergies plus polluantes* (assistance account for the substitution of pollutant energy sources or CASEP) are included in the method that was proposed by Gaz Métro for new customers (references (i) to (iii), the "*Gaz Metro As Proposed*").

Response:

The costs associated with processing financial assistance, including CASEP, are included under the heading "Traitement de la demande PRC" ("processing of the RCP application) of the method proposed by Gaz Métro.

- 1.4 Please indicate whether the calculation method that was proposed by Gaz Métro for new customers (references (i) to (iii), in the column "*Gaz Metro As Proposed*") take into account the service fees associated with the loss of customers. If so, please explain how.

Response:

All costs integrated into the calculation method that was proposed by Gaz Métro for new customers

were taken from amounts recognized in Gaz Métro’s service cost. However, this amount does not recognize any expenses for the loss of customers.

1.5 Please explain why the calculation method that was proposed by Gaz Métro for new customers (references (i) to (iii), in the "Gaz Metro As Proposed") only takes into account turbine meters.

Response:

The calculation method proposed by Gaz Métro takes all types of meters into consideration. For the purposes of the evidence-based presentation, the minimum and maximum facilities were presented in the table. The type of meter that presents the highest inspection costs is the turbine meter.

In the context of the application of the method proposed by Gaz Métro, each type of meter is associated with an inspection cost. This cost will be added to minimum cost for the type of market in order to create the marginal cost of long-term service delivery of this customer.

Please refer to the response to question 1.1 for explanations on how the proposed method works.

2. References :
- (i) Exhibit B-0144, p. 2;
 - (ii) Exhibit B-0145, p. 9 to 11;
 - (iii) Exhibit B-0144, Schedule A, p. 7;
 - (iv) Exhibit B-0144, Schedule A, p. 8 to 9;
 - (v) Exhibit B-0144, Schedule A, p. 6.

(i) **“3. GAZ MÉTRO’S PROPOSAL**

Gaz Métro retained the services of Dr. Edwin Overcast from Black & Veatch for his study of marginal costs. He examined the study filed by Gaz Métro in the context of the 2015 Rate Case and proceeded with his own evaluation of the marginal costs that are to be applied to the profitability analyses.

The findings of the analysis conducted by Black & Veatch differ from those filed by Gaz Métro in its Exhibit B-0549, GazMétro-17, Document 4 in R-3879-2014 (which exhibit is reproduced in Schedule A to this document). Gaz Métro, however, agrees with the analysis filed by Black & Veatch, presented in Exhibit Gaz Métro-6. Document 2 in this matter, and concurs with all of its conclusions. » [emphasis added]

(ii) The "Residential Marginal Operating Expenses", "CII Marginal Operating Expenses" and "Major Industries Marginal Operating Expenses" tables.

(iii) “Moreover, thanks to the study, the marginal cost of the service delivery associated with adding a load to an existing customer was established, as presented in the following table:

Market	Year 1		Year 2 and later	
	2014 cost Min	2014 cost Max	2014 cost Min	2014 cost Max
Residential	\$36.29	\$69.12	\$ -	\$ -
CII	\$52.62	\$158.96	\$ -	\$ -
Major Industries	\$36.29	\$239.60	\$ -	\$186.12

[...] the addition of a load will not increase the costs of invoicing, meter readings or the collection of

customer payments. However, it could imply the preparation of a new agreement, the performance of a credit assessment, the processing of financial assistance granted or, where applicable, the addition of a cellular line if the customer transfers to telemetry.

Only the additional costs relevant to the situation contemplated by the profitability analysis will be selected in the model proposed by Gaz Métro.”

(iv) “Gaz Métro has calculated the overall profitability of the development plan in accordance with the new method. [...] The proportions used to weigh the specific parameters (for example: type of meters installed, number of additional meters of service lines installed, etc.) have been established using the data for projects completed in 2013.

The following table represents the resulting weighted average cost, per market.

	Year 1	Year 2 and later
Residential	\$137.48	\$70.45
CII	\$316.07	\$208.06
Major Industries	\$5,276.92	\$5,212.96
Total	\$210.10	\$127.00

Note: Contrary to the table on page 7, line 1, the above table includes the maintenance costs that apply to the meters of additional service lines appearing in the Revenues Required. Given the significant number of meters of service lines involved in the Major Industries projects considered for this analysis, the impact on the weighted average cost for this market is significant.

(v) “**3.3 FINDINGS**

The proposed model introduces the notion of a marginal service delivery cost with minimum and maximum limits for each market. Consequently, the minimum limit will apply to customers whose metering equipment, installation and administrative services received are standard. [...] The limits [...] are presented by market in the following table.

Market	Year 1		Year 2 and later	
	2014 cost Min	2014 cost Max	2014 cost Min	2014 cost Max
Residential	\$109.30	\$449.91	\$62.52	\$379.30
CII	\$181.91	\$626.89	\$101.61	\$457.44
Major Industries	\$1,625.44	\$1,969.95	\$1,561.47	\$1,905.98

Moreover, above and beyond the maximum limit, one must also consider the additional maintenance costs whenever connections or additional meters of service lines are part of the project. It is difficult to integrate these additional costs within a range, since these costs will depend on the characteristics of the project being examined. It is noteworthy, however, that these additional costs have been considered in the calculation of the weighted average cost per market, as explained in section 5. “ [emphasis added]

Questions:

2.1 By comparing the study filed by Gaz Métro in the context of the 2015 rate case in reference (i) with the analysis filed by Black & Veatch in reference (ii), the Régie notes that the latter does not include

the marginal costs of long-term service delivery for additional loads (reference (iii)). Please explain why.

Response:

Load additions typically do not require new facilities and therefore do not have any marginal O&M. If load additions require new capital to replace existing facilities there is also no incremental O&M and in fact the NPV of future O&M actually decreases. In fact the new facilities have lower current O&M than the replaced facilities because they are largely plastic pipe that requires no cathodic protection. Also, new plastic typically requires little or no maintenance compared to older plant.

Any additional administrative costs would likely be more than offset by the decreased O&M costs, hence the assumption of zero marginal O&M costs.

- 2.2 Please provide details of the marginal costs of long-term service delivery associated with the additional loads of an existing customer, by market, using the tables presented in reference (ii) as a model.

Response:

These values are zero based on 2.1 above.

- 2.3 Please simulate the method proposed by Black & Veatch (reference (ii)), using the 2013 data, using reference (iv) as a model, and present the resulting weighted average marginal costs of long-term service delivery, by market, both for new customers and for additional loads. Please compare the findings obtained with those in the table presented in reference (iv) and comment on the differences.

Response:

Using the costs resulting from the method proposed by Black & Veatch, the weighted average marginal costs of long-term service delivery, per market, resulting therefrom are the following for new customers.

New customers		
Market segment	Year 1	Year 2 and later
Residential	\$84.07	\$17.03
CII	\$212.51	\$111.81
Major Industries	\$4,061.98	\$3,998.02
Global weighted results – New customers	\$136.44	\$56.20

Differences - New customers		
Market segment	Year 1	Year 2 and later
Residential	\$(53.41)	\$(53.42)
CII	\$(103.56)	\$(96.25)
Major Industries	\$(1,214.94)	\$(1,214.94)
Global weighted results – New customers	\$(73.66)	\$(70.80)

The results obtained are necessarily lower than those presented in reference (iv). Since the same weighted parameters were used, the differences are perfectly correlated with the differences presented in the tables in reference (ii).

The marginal costs of long-term service delivery for additional loads are evaluated at zero. See the response to question 2.1.

- 2.4 Please provide the calculation for year 1 as well as year 2 and later, the parameters that allowed Gaz Métro to establish the weighted average marginal cost of long-term service delivery for the Major Industries market in reference (iv). Please repeat this exercise for the average weighted marginal costs of long-term service delivery that will be obtained by applying the method proposed by Black & Veatch in response to the previous question.

Response:

To establish the weighted average marginal costs of long-term service delivery for the Major Industries market, each characteristic presented in Schedule 2 has been weighted based on the sales history.

Please see the details on the weightings used and the explanations provided in the response to question 1.5 of the CFIB's request for information in Exhibit Gaz Métro-8, Document 3.

Black & Veatch's proposals have no impact on the percentages used to calculate the weighted average marginal costs of long-term service delivery.

- 2.5 Please elaborate on the usefulness of establishing maximum thresholds for the marginal costs of long-term service delivery associated with new customers (compiled in the table in reference (v)), if these maximum thresholds are likely to be exceeded, as was the case for the Major Industries market in reference (iv), when the known data of the projects are applied (ex.: data for projects completed in 2013) in the calculation of the weighted average costs per market.

Response:

As explained in the response to question 1.1, Gaz Métro's method seeks to apply, to each project profitability analysis, a marginal cost that corresponds to the characteristics of the potential new customer. Given the high number of combinations, Gaz Métro has presented the potential marginal costs for each market in the form of minimum and maximum limits.

As for the portion of the marginal cost associated with the number of meters of service lines added to the project, a maximum limit could not be established given the infinite number of possibilities. Consequently, only those characteristics that present finite possibilities have been included in the tables presenting the minimum and maximum limits.

- 2.6 For each of the three major customer categories, please specify to what the notion of "standard" refers.

Response:

The notion of "standard" refers to the cost for each type of market having no particular characteristic, as explained in the response to question 1.1.

3. References:

- (i) Exhibit [B-0144](#), Schedule 2 of Schedule A, p. 1;
- (ii) Exhibit [B-0145](#), p. 6;
- (iii) Exhibit [B-0145](#), p. 8;
- (iv) Exhibit [B-0145](#), p. 9 to 11;
- (v) Exhibit [B-0145](#), p. 3

Preamble:

- (i) “Under the Conditions of Service and Tariff, no credit assessment is performed for residential customers.”
- (ii) “The costs of collections and bad debt are not considered marginal costs because new customers should be screened for credit worthiness before being added to the system and there should be no expected costs related to bad debt.” [emphasis added]
- (iii) “Bad Debt And Collection And Recovery Costs - As noted in section 2 - Bad debt and collections expense should not be anticipated for a new customer and the marginal cost should be zero.”
- (iv) Tables “Residential Marginal Operating Expenses”, “CII Marginal Operating Expenses” and “Major Industries Marginal Operating Expenses”.
- (v) “As a general matter, all of this leads to the conclusion that the only current impact of a new customer on O&M is a reduction in per unit O&M for other customers initially and a small present value of future O&M that the new customer will share with existing customers for their assets before his own assets cause costs. This leads to the conclusion that the most reasonable estimate of marginal O&M costs for customers is zero for physical plant, positive for service establishment and minimal for direct customer charges.

[...]

MCOS studies focus on the change in costs associated with a small change in output as measured by the customer and capacity addition under the applicable line extension policy.” [emphasis added]

Questions:

- 3.1 Please reconcile the information provided by Gaz Métro in reference (i) with Black & Veatch’s affirmation in reference (ii) and justify the choice of the marginal costs of long-term service delivery being set at zero (reference (iii)) in the items pertaining to bad debts, collection and recovery for this type of customer (“Costs of Bad Debts” and “Collection and recovery costs”), in reference (iv).

Response:

Gaz Metro is currently not allowed, by mandate, to review the credit worthiness of its residential customers. The social policy of not allowing credit checks for residential customers is inconsistent with good utility practice because capacity that will not be paid for should not be built. The financial implications of this policy creates potential marginal social costs imposed by the policy but not marginal utility costs since Gaz Metro would expect that those costs will be paid by all customers as allocated by the Régie. Since these costs are socialized to rates, they are included in embedded costs and are not marginal to added load or new customers.

- 3.2 The Régie understands from reference (v) that, according to the expert, the O&M costs correspond to the costs associated with incremental changes to the demand, such as the addition of a single customer, which supports the theory defended by the expert holding that the O&M costs are null. Please indicate whether the expert’s conclusions would be the same if the demand were to significantly increase as a result of a line extension and the addition of several customers, as in the case of the connection of a new municipality or a new residential project.

Response:

The conclusions would be the same. Line extensions are based on the economic analysis of the collective project including the size and type of each customer in the project. New projects would

not be undertaken if the Company thought they would not be able to recover the full revenue requirement including any incremental O&M costs. Thus the marginal cost of a multiple customer project is analyzed based on the sum of revenues and costs for individual customers including the cost of common facilities. The analysis is based on current delivery rates plus any contribution required to satisfy the economic test of the aggregate project. This means that once approved, the project recovers all costs including new O&M.

Costs	Explanations applicable to	Methodology	Calculation details
Sending of subscription confirmation letter	All markets	Calculation of average cost	The cost of sending the subscription confirmation letter corresponds to the average cost of a pre-printed sheet, envelope, printing and stamp.
Cost of sending an invoice	All markets	Calculation of average cost	The average cost of sending an invoice was calculated for each type of sending (paper, Postel and electronic). The costs included are those of the materials and service providers used. The proportion of each type of invoice is based on the history for 2014. The cost used corresponds to the weighted average and is the same for all markets.
Cost of opening and invoice file	All markets	Time study	The time required to perform this activity was evaluated by those responsible for invoicing based on their past experience. The time, in minutes, was multiplied by the average hourly rate of clerks, plus fringe benefits.
Meter reading cost	All markets	Time study	The cost of the meter reading activity was established by evaluating the proportion of the time devoted by the resources assigned to read meters based on their past experience. A full-time equivalent number per year was thus calculated. The cost of labour, including salary, fringe benefits and clothing, was applied to that full-time equivalent number. The total cost thus obtained was divided by the number of customers, and the average cost is applied to all markets.
Input of new agreement	All markets	Time study	The average time for inputting a new agreement by market type was evaluated by those responsible for sales based on their past experience. The time, in minutes, was multiplied by the average hourly rate of the clerks, plus fringe benefits.
Cost associated with a credit assessment conducted internally	CII and Major Industries	Time study /Calculation of average cost	Credit assessment costs consist of the salary and fringe benefits of the employees assigned to this task, plus the cost of the businesses providing credit information services. The actual data on the salary and fringe benefits of each of the employees assigned to this task in 2013 and the cost of service providers for fiscal year 2012 (last available year at the time of analysis) were added together then divided by the number of assessments carried out in 2012.

Annual cost of cashing payments	All markets	Calculation of average cost	For each of the markets, the average cost of cashing a payment was calculated by multiplying the number of transactions by the rates charged by our suppliers, and this for each type of payment method (for example, payment through Internet, cheque or pre-approved payment), then dividing the total cost by the number of transactions. This average cost was then multiplied by 12 months to obtain the annual cost per customer.
Cost of processing a standard customer call	All markets	Calculation of average cost	The average cost of a call was established based on an internal study conducted by the customer information team. It consists of salaries and fringe benefits. The cost per customer was established based on the assumption that a new customer generates a call. The study does not allow to distinguish between costs per market. Note that for Major Industries customers, most of the time the calls are made directly to the advisor of this customer, and not to customer service. The cost, for Major Industries, is included in the activity “customer maintenance costs” activity.
Cost of bad debts	All markets	Calculation of average cost	The amounts stricken per market in fiscal year 2013 was divided by the number of customers of the respective markets.
Collection and recovery costs	All markets	Time study /Calculation of average cost	The total collection and recovery costs, including the salary and fringe benefits of the collectors, clerks and representatives (in addition to lawyers’ fees), have been allocated among the markets based on the bad debt costs, the whole divided by the number of customers of the respective markets.
Customer maintenance costs – Major Accounts	CII	Time study	The customer maintenance costs for major accounts has been established by evaluating the proportion of time spent by the sales representatives on maintaining customers, based on their past experience. These hours were divided by the number of accounts, then multiplied by the average hourly rate of the representatives, plus fringe benefits. The result obtained therefore corresponds to the average annual cost per customer.
Customer maintenance costs – Major Industries	Major Industries	Time study	The customer maintenance costs for Major Industries was established by evaluating the proportion of time the Major Industries advisors spent on maintaining customers, based on past experience. These hours were divided by the total number of Major Industries customers, then multiplied by the average hourly rate of the representatives, plus fringe benefits. The result obtained therefore corresponds to the average annual cost per customer.
Preventive maintenance – Connection	All markets	Calculation of average cost	The hours spent on connection inspections were compiled for 2013. These hours were multiplied by the sector’s standard rate, which includes the salary, fringe benefits and clothing of a technician. The total cost was divided by the number of connections to obtain the average cost per connection.

Corrective maintenance – Connection	All markets	Calculation of average cost	For each fiscal year 2012 and 2013, the hours spent on corrective maintenance of connections were compiled and multiplied by the standard rate for the corresponding year, which includes the salary, fringe benefits and the clothing of a technician. The total cost was divided by the number of connections to obtain the average cost. The final result corresponds to the average for the two years. Use of the data over a two-year period allowed to obtain a history that is representative of corrective maintenance.
Processing of RCP application	All markets	Time study	The average time for producing financial assistance agreements per market type was evaluated by those in charge of sales, based on their past experience. The time, in minutes, was multiplied by the average hourly rate of the clerks, plus fringe benefits. To the costs of labour was added the average unit cost for producing a cheque. This was established by internal studies and corresponds to the cost of materials and mailing.
Maintenance of line attributable to customer – Preventive	All markets	Calculation of average cost	All hours relating to the preventive maintenance programs for service lines were compiled for 2013 and multiplied by the standard rate of the technicians assigned to those duties, which includes salary, fringe benefits and clothing. Since some programs span several years, the hours needed to cover all of the service lines were calculated, then converted to an annual basis. The total cost was divided by the number of service lines to obtain the average cost per meter.
Maintenance of line attributable to customer – Corrective	All markets	Calculation of average cost	For 2012 and 2013, the hours spent on the corrective maintenance of service lines was compiled and multiplied by the standard rate for the corresponding year, which includes the salary, fringe benefits and the clothing of a technician. The total cost was divided by the number of meters of service lines to obtain the average cost. The final result corresponds to the average for two years. Use of the data over a two-year period allowed to obtain a history that representative of corrective maintenance.
Inspection of (all types of) meters	All markets	Time study	Each type of meter has its own defined inspection program. A standard time and frequency are specified for each such meter. For frequencies in excess of once a year, the standard time has been converted to an annual basis. It was then multiplied by the standard rate (salary, fringe benefits, clothing) of the cost centre for instrumentalists in order to obtain the annual inspection cost for each type of device. Note that there is no inspection program for positive displacement meters using radiometry. These are replaced when necessary.
Inspection of telemetry and corrective instruments	All markets	Time study	The presence of corrective and telemetry instruments on a customer's meter prolongs the inspection time required. Inspection costs have been calculated by comparing the average inspection time for devices equipped with these instruments and those that are not. The additional time required was multiplied by the standard rate of instrumentalists, which includes their salary, fringe benefits and clothing.

Telemetry – Cost of a cellular line	Major Industries	Unit cost	Corresponds to the monthly cost charged by the supplier in 2013, multiplied by 12.
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Characteristics	Options	Costs - Year 1	Costs - Year 2 and later
Market type	Residential	\$55.88	\$9.10
	CII	\$90.41	\$10.11
	Major Industries	\$73.92	\$9.96
Type of meters and instruments	Inspection of positive displacement meters, with radiometry	\$-	\$-
	Inspection of turbine meter	\$31.68	\$31.68
	Inspection of fixed-pressure factor (FPF) positive displacement meter, with radiometry	\$36.96	\$36.96
	Inspection of rotary gas meter, with radiometry	\$42.24	\$42.24
	Inspection of fixed-pressure factor (FPF) positive displacement meter, with radiometry	\$63.36	\$63.36
	Inspection of spin test for turbines smaller than 12 inches	\$79.20	\$79.20
	Inspection of corrective instruments	\$87.11	\$87.11
	Inspection of telemetry	\$118.79	\$118.79
	Inspection of spin test for turbines measuring 12 inches and up	\$237.59	\$237.59

RCP application	Residential (Yes/No)	\$23.83	\$-
	Commercial (Yes/No)	\$32.90	\$-
Addition of a cellular line	Yes/No	\$186.12	\$186.12
Meter of service line	Number of additional meters of service lines for the project	\$0.59/m	\$0.59/m