

**RESPONSE OF GAZ MÉTRO LIMITED PARTNERSHIP (GAZ MÉTRO) TO THE
REQUEST FOR INFORMATION NO. 11 FROM THE RÉGIE DE L'ÉNERGIE (THE "RÉGIE")
REGARDING THE GENERIC MATTER RELATING TO THE ALLOCATION OF COSTS
AND RATE STRUCTURE OF GAZ MÉTRO**

The Method

- 1. Reference:** (i) Exhibit B-0253, pp. 2 and 3

Preamble:

"1.3 Please present the different profitability objectives that were set for the residential, business and large corporation markets referred to in reference (iii).

Response:

The following minimal profitability objectives were set for fiscal year 2016-2017:

- Residential market: 6.28%;*
- Business market: 14.13%; and*
- Sales Major Industries market: 6.28%.*

Requests:

- 1.1 Please provide the profitability index (PI) that corresponds to each market's objective.

Response:

With the current PCC of 5.28%, the correspondences are as follows:

- Residential market: an IRR of 6.28% corresponds to a PI of 1.14;
- Business market: an IRR of 14.13% corresponds to a PI of 2.35;
- Sales Major Industries market: an IRR of 6.28% corresponds to a PI of 1.14.

- 1.2 Please indicate whether, in its new proposal, the Distributor maintains separate objectives for each market. If not, please justify these changes in policy.

Response:

In its new proposal, Gaz Métro still maintains separate objectives for each market.

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2. **Reference:** Exhibit B-0278, p. 14

Preamble:

Table 1 – Peer Group Characteristics.

Requests:

2.1 Please add Gaz Métro to Table 1.

Response:

Black & Veatch

Please see revised Table 1 below.

Table 1 – Peer Group Characteristics

UTILITY NAME	LOCATION OF OPERATION	NUMBER OF CUSTOMERS	AREA SIZE (SQUARE MILES)	CUSTOMER DENSITY (PER SQUARE MILE)
<u>Canadian Gas Utilities</u>				
ATCO Gas	AB	1,100,000	—	—
Enbridge Gas Distribution	ON	2,158,000	10,988	196
Enbridge Gas-New Brunswick	NB	12,000	—	—
FortisBC	BC	982,000	34,667	28
Gaz Métro	QC	200,000	32,695	6
Union Gas Limited	ON	1,400,000	72,132	19
<u>U.S. Gas Utilities</u>				
Cascade Natural Gas	WA	273,365	8,197	33
Chesapeake Utilities	MD, DE, FL	59,546	9,744	6

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Columbia Gas (NiSource) ¹	PA, MA, VA, OH, KY, MD	1,161,457	60,174	19
Interstate Power & Light	IA	234,819	36,577	6
Unitil Corporation	ME, NH, MA	76,113	3,295	23

2.2 Please comment on Gaz Métro's position with respect to comparable Canadian entities.

Response:

Black & Veatch

The Canadian gas utilities in Black & Veatch's Peer Group are comparable to Gaz Métro since they are among the larger gas distribution utilities in Canada, and they are the largest gas distribution utilities in their respective provinces. Black & Veatch also understands that these gas utilities have been used as comparable utilities for Gaz Métro in past rate proceedings before the Régie.

3. **Reference:** Exhibit B-0277, p. 5

Preamble:

Table 1 – Inputs used for each of the profitability evaluation methods

Request:

3.1 Please indicate how system reinforcement costs are considered in the development plan's overall profitability. Please indicate whether these costs are identified separately. Please provide specific examples in your response.

Response:

Gaz Métro provides a separate budget for reinforcement costs in the development plan of the rate case as is indicated in Exhibit B-0196, Gaz Métro-7, Document 2 of R-3987-2016. With

¹ This report will refer to Columbia Gas of Pennsylvania, Columbia Gas of Massachusetts, Columbia Gas of Virginia, Columbia Gas of Ohio, Columbia Gas of Kentucky, and Columbia Gas of Maryland collectively as "Columbia Gas."

respect to the *a priori* development plan filed in the annual report², the reinforcement costs are included but not presented separately as they are in the rate case. Gaz Métro proposes that, in its future *a priori* development plans, the reinforcement costs be presented in a separate column as they are in rate cases. This will allow for the direct comparison between reinforcement investments provided for in the rate case and actual investments indicated in the *a priori* development plan of the annual report.

- 4. References:** (i) Exhibit B-0277, p. 6
(ii) Exhibit B-0277, p. 17

Preamble:

- (i) “For projects with potential for profitability over time, [...]” [emphasis added]
- (ii) Gaz Métro will improve the *a posteriori* profitability analysis that is filed with the annual report. More specifically, Gaz Métro will add the *a posteriori* profitability analysis six years later for development projects with a PI of between 0.8 and 1, and for industrial park and road repaving projects.” [emphasis added]

Requests:

- 4.1 Please confirm whether projects with a PI below 0.8 but with customer contributions and potential for profitability will also be included in the *a posteriori* follow-up.

Response:

Gaz Métro confirms this.

- 4.2 Please explain whether Gaz Métro considers that a period of more than 6 years may be required for a project to achieve its potential for profitability. If applicable, please elaborate.

Response:

Gaz Métro believes that a period of six years is sufficient for a project to achieve its potential for profitability. As proof, as is indicated in the response to question 9.3a filed on August 10, 2017 (Gaz Métro-9, Document 1-revised), the *a posteriori* IRR of the 2010 plan (i.e., six years after) for the residential market is 11.64% which corresponds to a 2.5% increase of the IRR. As for the business market’s 2010 plan, the *a posteriori* IRR is 18.37%, an increase of 6.7%.

Gaz Métro is therefore of the opinion that the *a posteriori* profitability analysis 6 years later is an adequate period to allow for proper measuring of project densification.

² R-3992-2016, Gaz Métro-14, Document 3.

- 4.3 Please indicate whether Gaz Métro intends to carry out projects with a potential for profitability without a contribution, even if a project's PI is below 0.8. Please explain.

Response:

Gaz Métro reiterates that in R-3867, B-0277, Gaz Métro-7, Document 4, it presents to the Régie the acceptance criteria for development projects based on the New Method that will maximize the positive impacts for customers. On the basis of recommendations made by Black & Veatch, Gaz Métro intends to adopt the profitability index approach used by Fortis BC, Union Gas Limited and Enbridge Gas Distribution. Rather than an acceptable minimum threshold ("AMT"), Gaz Métro uses a PI in the New Method.

Essentially, there are two decision-making criteria related to the PI.

- 1- For individual projects with no potential for densification, the PI target is greater than or equal to 1. If the project has no densification potential and the PI target isn't achieved, Gaz Métro may require a contribution from the customer in order to achieve a PI of 1.
- 2- For individual development projects with densification potential, the PI target must be greater than or equal to 0.8. If the densification potential is below 0.8 but there is densification potential, Gaz Métro may require a contribution from the customer in order to achieve a PI of 0.8.

Gaz Métro points out that these decision-making criteria are part of the internal governance rules adopted by the company in order to guide decision-making with respect to authorizing new sales and new development projects.

Furthermore, Gaz Métro will apply these decision-making guidelines, except in very rare exceptions. Such cases would occur where it is essential for Gaz Métro to have operational and discretionary flexibility with respect to business decisions it takes in the normal course of carrying out its business. To this end, Gaz Métro must be able to acquire assets that are useful to the operation of its systems, while acting in accordance with the standard of care. Therefore, in certain exceptional circumstances, Gaz Métro may carry out projects outside of these guidelines.

Finally, this approach is consistent with the *Conditions of Service and Tariff* in effect as at March 31, 2017, with article 4.3.4 stipulating among other things that *the distributor may, on entering into the contract, agree with the customer on a financial contribution payable by the customer*. Please refer to the response to question 1.10 of the Régie's RFI no. 10 (R-3867, Gaz Métro 9, Document 1), as well as to the response to question 3-7b of SÉ-AQLPA's RFI no. 3 (R-3867, Gaz Métro 9, Document 7).

5. **Reference:** (i) Exhibit B-0277, p. 14

Preamble:

- (i) *“If the project has no densification potential and the PI is below 1, Gaz Métro may require a contribution from the customer in order to achieve a PI of 1.”*

Request:

- 5.1 Please indicate whether Gaz Métro intends to carry out projects with no potential for profitability without requiring a contribution from the customer even if the project’s PI is below 1. If applicable, please elaborate.

Response:

Please refer to the response to question 4.3.

6. **References:** (i) Exhibit B-0253, p. 5
(ii) Exhibit B-0277, pp. 12 and 13

Preamble:

- (i) *“1.11 Where the anticipated profitability is lower than the PCC, please indicate whether, according to the proposed method, Gaz Métro will require a contribution for all extension projects deemed not profitable on the basis of the difference between the PCC and the anticipated profitability.”*

Response: According to the method presented in January 2017 in Exhibit B-0178, Gaz Métro-7, Document 1, Gaz Métro would require a contribution in two situations.

- 1. If the a priori profitability of an extension project fails to achieve the acceptable minimum threshold. In such cases, Gaz Métro may require a contribution to achieve the AMT. Such AMT development projects must have a potential for future densification allowing for the achievement of the PCC.*
 - 2. If the a priori profitability of an extension project does not achieve the PCC and the potential for future densification does not allow for the achievement of a PI of 1, Gaz Métro may require a contribution, as the extension project is deemed unprofitable. The amount of the contribution makes up for the difference between the a priori profitability and the PCC.”*
- (ii) *In the New Method, Gaz Métro may require a contribution under two circumstances.*
- 1. If the a priori profitability of a potentially profitable development project fails to achieve a PI of 0.8. In such cases, Gaz Métro may require a contribution to achieve a PI of 0.8. Such*

development projects must have a potential for future densification allowing for the achievement of a PI of 1.

2. If the a priori profitability of a development project does not achieve a PI of 1 and the potential for future densification does not allow for the achievement of a PI of 1, Gaz Métro may require a contribution, as the extension project is deemed unprofitable. The amount of the contribution makes up for the difference between the a priori profitability and a PI of 1.”

Requests:

- 6.1 Taking into account the references, please indicate whether requiring a contribution is discretionary.

Response:

Gaz Métro confirms that, as is stipulated in the Conditions of Service, the requirement of a contribution is discretionary. Please also refer to the response to question 4.3.

- 6.2 Please provide further details on the set of rules that were defined to provide an equitable framework for the financial contribution.

Response:

Please refer to the response to question 4.3.

7. **Reference:** (i) Exhibit B-0277, p. 13

Preamble:

(i)

“1. If the a priori profitability of a potentially profitable development project fails to achieve a PI of 0.8. In such cases, Gaz Métro may require a contribution to achieve a PI of 0.8. Such development projects must have a potential for future densification allowing for the achievement of a PI of 1.

2. If the a priori profitability of a development project does not achieve a PI of 1 and the potential for future densification does not allow for the achievement of a PI of 1, Gaz Métro may require a contribution, as the extension project is deemed unprofitable.”

Request:

- 7.1 Please explain the difference between *potential for profitability* and *potential for future densification*.

Response:

Gaz Métro indicates that in the preamble, there is no difference between the terms *potential for profitability* and *potential for future densification*. Furthermore, the preamble could have been worded in the following manner:

1. If the *a priori* profitability of a development project, with densification potential, does not achieve a PI of 0.8, then Gaz Métro may require a contribution in order to achieve a PI of 0.8. Such development projects must have a potential for future densification allowing for the achievement of a PI of 1.
2. If the *a priori* profitability of a development project does not achieve a PI of 1 and the potential for future densification does not allow for the achievement of a PI of 1, Gaz Métro may require a contribution, as the extension project is deemed unprofitable.

8. **References:** (i) Exhibit B-0277, p. 15
(ii) Exhibit B-0253, p. 59

Preamble:

- (i) “Under the New Method, Gaz Métro will set aside a budget of approximately \$1.5 million that may be accessed to achieve a PI of 0.8 for industrial park development and road repaving projects with [future densification] potential [...]”.
- (ii) “Gaz Métro will also set aside a budget of approximately \$1 million that may be accessed to achieve a PI of 1, which corresponds to an IRR of 5.28% for industrial park development and road repaving projects”.

Requests:

- 8.1 Please clarify the exact amount of the planned budget for industrial park development and road repaving projects.

Response:

Gaz Métro clarifies that it will set aside a budget of approximately \$1.5 million that may be accessed to achieve a PI of 0.8 for industrial park development and road repaving projects with potential for future densification. This budget may be reviewed each year and will be

established during the rate case. Gaz Métro reiterates that this budget will be drawn from the development plan's overall profitability.

- 8.2 Please provide explanations as to how the amount for industrial park development and road repaving projects was determined.

Response:

In 2016, the required average investment amount for industrial park development and road repaving projects was approximately \$150,000. Taking into account approximately 10 projects, a budget of \$1.5 million would be sufficient to carry out this type of project during a given year.

- 8.3 Please indicate what percentage of the development plan's total budget is represented by the amount.

Response:

The percentage of the development plan's total budget that is represented by the planned budget for industrial park development and road repaving projects may vary from year to year. According to the 2018 Rate Case's most recent development plan³, the investments totaled \$67 million. An added budget of \$1.5 million would constitute 2.2% of the development plan's total budget.

- 8.4 Please indicate the allocation criteria for various projects.

Response:

Gaz Métro will allocate the budget for industrial park development and road repaving projects by prioritizing projects that show the greatest potential for densification. It goes without saying that the densification potential of such projects should allow for the achievement of a profitability index of 1. In addition, the development plan's achievement of a profitability index greater than or equal to 1.1 is another element of consideration in the allocation of this budget.

9. **References:** (i) Exhibit B-0253, p. 59
(ii) Exhibit B-0277, p. 17

Preamble:

- (i) *"12.2 Considering that Gaz Métro can benefit from cost savings as well as the acceptance of several municipalities when it benefits from a window of opportunity resulting from development projects*

³ R-3987-2016, B-0196, Gaz Métro-7, Document 2.

for an industrial park or the repaving of roads, please explain why the profitability of such a type of project would be less than the PCC, and even less than the AMT of 2%.

Response:

For industrial park development projects, Gaz Métro may achieve profitability lower than the AMT as the majority of the land is vacant and there is no known customer ready to commit at the time of Gaz Métro's decision. However, the competitive position and attributes of natural gas in processes are sought after by industries and will therefore allow for the achievement of the PCC over time."

(ii) "Gaz Métro will improve the *a posteriori* profitability analysis that is filed with the annual report. More specifically, Gaz Métro will add the *a posteriori* profitability analysis six years later for development projects whose PI is between 0.8 and 1, and for industrial park and road repaving projects". [emphasis added]

Requests:

9.1 Please explain whether Gaz Métro considers a period of more than six years for an industrial park development project to achieve its potential for profitability. If applicable, please elaborate.

Response:

Gaz Métro believes that a period of six years should be sufficient for industrial park development projects with potential to achieve in large part their potential for profitability. It goes without saying that a project's densification may continue beyond the six-year period, which would allow for a greater increase of the project's profitability.

Gaz Métro believes that the *a posteriori* profitability analysis 6 years is an appropriate length of time to measure densification.

9.2 Please comment on whether, with its new approach, Gaz Métro will carry out separate follow-ups on road repaving projects and industrial park development projects.

Response:

The goal of adding an *a posteriori* profitability analysis six years later, for development projects whose PI is between 0.8 and 1, as well as for industrial park and road repaving projects, is to confirm that such projects generally achieve a PI greater than 1. Therefore, for reasons of regulatory efficiency, coupled with the fact that the current *a posteriori* follow-up 3 years later already requires many months of work, Gaz Métro does not foresee carrying out separate follow-ups for road repaving projects and industrial park development projects.

10. Reference: (i) Exhibit B-0278, p. 17

Preamble:

(i) “[...] individual projects larger than the 30 meter extension allowance must achieve at least a P.I. of 0.8 in order for Union Gas Limited to pay for the project in full.”

Request:

10.1 Please confirm whether, for Union Gas, individual projects requiring an extension of less than 30 meters are exempt from having a PI of 0.8.

Response:

Black & Veatch

Black & Veatch confirms that individual projects being evaluated by Union Gas Limited are exempt from having a PI of 0.8 if the project requires less than 30 metres of gas main.

11. Reference: (i) Exhibit B-0278, p. 17

Preamble:

(i) “As a utility operating in Ontario, Union Gas Limited complies with the regulations listed above when performing its economic test. Union Gas Limited is also required to perform its economic test for a 40 year period (or 20 years for large volume customers), [...]”.

Requests:

11.1 Please comment on the relevance of using Union Gas’s approach and applying a profitability analysis over a 20-year period for projects (or parts of a project) in the MIS market.

Response:

Extension projects that affect the MIS market generally involve investments of over \$1.5 million and are therefore submitted individually to the Régie. Although a 40-year period is used as a premise, Gaz Métro carries out analyses on a case-by-case basis with respect to customers in the MIS market to ensure that a 40-year period is adequate. It should be noted that, in the past, Gaz Métro has used profitability periods of under 40 years, notably for mining and biogas projects with shorter anticipated operating periods.

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- 11.2 Please provide a table of the system extension projects from the past 20 years that include a customer in the MIS market. Please indicate the average duration of service for these clients.

Response:

Customer	First year of consumption	Status
Serres Toundra	2016	Still active
FibreK	2013	Still active
Québec Lithium	N/A	Consumption ending
Graymont	2012	Still active
Université de Sherbrooke (Centre MiQro Innovation)	2010	Still active
TRT-ETGO (Viterro Inc.)	2010	Still active
TCE	2006	Still active
AGC Flat Glass North America LTD.	2003	Ended in 2009 (6 years)
Harbison Walker (Resco)	2000	Still active
Magnolia	1998	Ended in 2003 (5 years)
Valero	1993	Still active

It should be noted that certain MIS customers have been serviced by Gaz Métro for over 40 years. Of Gaz Métro's ten biggest customers, five have been active since the 1960s and four since the 1980s.

12. **Reference:** (i) Exhibit B-0253, p. 4

Preamble:

(i) "1.7 Inasmuch as the AMT would be targeted for part of the development plan projects, please indicate which proportion of the development plan's overall portfolio, in number of projects and in dollars, could be made up of projects achieving the AMT. In such cases, please comment on the advisability of setting an AMT for the development plan's overall profitability.

Response:

According to Tables 1 and 2 in Exhibit B-0220, Gaz Métro-7, Document 2, approximately 9% of customers and 12% of revenues from the residential market, as well as 18% of customers and 11% of revenues from the business market, could originate from AMT projects over the course of a development plan's period. Furthermore, as mentioned in the introductory commentary, Gaz Métro notes that it has filed a new approach for evaluating profitability, which is presented in Exhibit Gaz Métro-7, Document 4."

Request:

12.1 Please update the response by using the new approach.

Response:

As is indicated in Exhibit B-0220, Gaz Métro-7, Document 2, it is difficult for Gaz Métro to anticipate the scale and nature of projects over such a large period. Furthermore, Gaz Métro does not have a vast history of AMT projects. As it happens, Gaz Métro has no history of proposed projects using its new method.

In addition, Gaz Métro reiterates mentioning in Exhibit R-3867, B-0277, Gaz Métro 7, document 4 that the methodology for evaluating the profitability and acceptance criteria of development projects proposed by Black & Veatch is based on a number of elements that are similar to those of the AMT Method that Gaz Métro presented in Exhibits B-0178, Gaz Métro-7, Document 1 and B-0220, Gaz Métro-7, Document 2. In addition, the slight increase in the IRR that results from subtracting general expenses for each project, coupled with a PI threshold of 0.8 that is slightly higher than the AMT, ensures that the new method should essentially allow for the same sales as those of the AMT method.

Therefore, the new method should impact approximately 9% of customers and 12% of revenues in the residential market, and 18% of customers and 11% of revenues in the business market, to which the AMT Method is applied.

13. **Reference:** (i) Exhibit B-0253, p. 10

Preamble:

Number of the category of capital asset	Designation of the category of capital asset	Depreciation period	Lifespan (note 1)
Z1102	Building connections – Direct plastic	19.42 years	50 years
Z1104	Preliminary pressure connections – inserted plastic	19.42 years	50 years
Z1105	Preliminary pressure connections – steal	19.42 years	50 years
Z1150	Mainlines – steal	19.42 years	50 years
Z1200	Meters	19.42 years	50 years

Note 1: R-3879-2014, B-0466, Gaz Métro-107, Document 11, Schedule A, Page IV-4, Column 4. The first two figures represent the lifespan of this asset category.

Request:

- 13.1 Taking into account the lifespan of meters that was presented in reference (i), please comment on the possibility of including reinvestment for meters in the profitability analysis.

Response:

Gaz Métro does not believe that it should include reinvestment for meters in the profitability analysis.

The profitability analysis tool considers an analysis period of 40 years. This period must represent the weighted average lifespan of assets, such as building connections and mains, that make up a project's major investments. In R-3173-89 which lead to Decision D-90-60, Gaz Métro's recommendation was to maintain an analysis period of 40 years to evaluate the profitability of new projects as this period almost matches the average lifespan of connections and lines. The weighted average of these two asset categories was then established at approximately 43 years.

It should be noted that the weighted average of lifespan of investments for the 2015-2016 *a priori* development plan is 42 years, including meters. The use of a 40-year lifespan for all assets allows for processing simplicity with respect to calculations and, more importantly, remains representative of the weighted average lifespan of the assets, as was re-established in Decision D-90-60.

14. **Reference:** (i) Exhibit B-0253, p. 35

Preamble:

1. "10.1 Please explain in detail why the analysis was applied only to the business sector.

Response:

As is indicated in the reference, Gaz Métro wanted to select projects for which a contribution was required a priori to achieve the anticipated profitability. Consequently, many projects for which a contribution was required a priori to achieve the expected profitability were available by year for the business market, but not so for the residential market."

Requests:

- 14.1 Regarding reference (i), please elaborate on what leads Gaz Métro to conclude that the residential market shows densification potential.

Response:

As is indicated in the preamble, Gaz Métro did not select any residential projects for analysis since, unlike the business market, the number of projects for which a contribution had been

required *a priori* to achieve the expected profitability was insufficient. It was in fact for this reason that Gaz Métro did not anticipate many AMT projects⁴ for the residential market.

To ensure that projects achieve the PCC upon completion and lead to rate reductions for customers, Gaz Métro reiterates that it has established a governance process framing each step leading to the implementation of a project, both for the business market and the residential market.

In addition, the recent analysis, conducted in response to question 9.3 of the Régie's Request for Information no. 9⁵, reveals that the *a posteriori* IRR, when taking densification into account, is also higher for the residential market after four, five and six years.

Gaz Métro therefore concludes that, in general, the residential market also densifies with sales that were not included in the *a priori* profitability test.

- 14.2 Regarding reference (i), please explain the reasons for which Gaz Métro concludes that the residential market has a densification potential similar to that of the business market.

Response:

Gaz Métro wishes to clarify that it does not conclude that the residential market has a densification potential similar to that of the business market. In fact, Gaz Métro also does not conclude that all projects will have the same densification potential. However, Gaz Métro notes that, as revealed by the analysis conducted in response to question 9.3 of the Régie's request for information no. 9⁶, the *a posteriori* IRR, taking densification into account, is higher for both the residential market and the business market after four, five and six years.

As the potential for densification may vary between projects and markets, Gaz Métro does not propose a "blanket" approach in which all projects with a PI equal to or greater than 0.8 would be authorized. The new method is based on a case-by-case governance process, in which potential is evaluated for all projects having a PI *a priori* below 1.

- 14.3 Please provide examples of projects for which a contribution has been required *a priori* to achieve the anticipated profitability in the residential market. Please also perform the same exercise as the one carried out for the business market.

Response:

Firstly, the following is a description of two 2009 residential projects for which a contribution was requested:

⁴ Project authorized using the methodology presented in January 2017 in Exhibit B-0178, Gaz Métro-7, Document 1.

⁵ For more details, please refer to Exhibit Gaz Métro-9, Document 1- updated.

⁶ For more details, please refer to Exhibit Gaz Métro-9, Document 1- updated.

1. Gaetan-Guay Triplex (Bois-des-Filion)

- Project consisting of six triplex buildings with natural gas hot water system and fireplaces in each individual unit.
- A service line of over 70 m for supplying natural gas to the project.
- Required contribution of \$2,500 to achieve the expected profitability.

2. Émile-Zola Street (Sherbrooke)

- Project consisting of five buildings of four residential units and four buildings of six residential units (44 units in total). The customer opted for individual fireplaces in each residential unit.
- A service line of over 175 m was required for supplying natural gas to the project.
- Required contribution of \$37,000 to achieve the expected profitability.

With respect to the request of carrying out the same exercise as the one performed for the business market, Gaz Métro indicates that, in response to the Régie's Request for Information no. 9, it performed an analysis of the 12 projects with contributions for the residential market for the 2009 to 2013 development plans. The average increase of the IRR a posteriori over five years is of 2.12%. For further details, please see response 9.3c filed on August 10, 2017 (Gaz Métro-9, Document 1-revised).

Follow-ups

15. Reference: Exhibit B-0278, p. 17

Preamble:

“Black & Veatch notes that U.S. utility regulators tend to establish only broad guidelines for the economic tests to financially evaluate system extension projects and provide the gas utility with a fair degree of flexibility in how it actually estimates the additional capital costs and O&M expenses and performs the underlying computations. The larger projects are typically reviewed during rate cases to ensure the utility is prudently applying its discretion so that new customers are not being subsidized by existing customers.” [emphasis added]

Request:

15.1 Please elaborate further on the follow-up carried out by U.S. regulators cited in reference (i) with respect to large projects. Please specify its characteristics.

Response:

Black & Veatch

Black & Veatch did not conduct specific research concerning how American regulators review the larger system extension projects proposed in rate cases by gas utilities. However, it is Black & Veatch’s general experience that during rate cases, American gas utilities are often either required to submit information with the rate case filing related to their larger capital projects or are asked to provide such information during the rate proceeding. The type of information that is filed varies for each utility, but the general purpose of this information is to provide the regulator and other parties with details on the larger additions to rate base to ensure such investments are prudently incurred. Typically, the information submitted by the utility includes the costs of construction, the expected incremental revenue from new customers and how the facilities will be utilized where there are multiple purposes justifying the capital investment.

16. Reference: Exhibit B-0278, p 22

Preamble:

“Black & Veatch researched and surveyed the utilities in the Peer Group to understand their reporting requirements and the regulatory review process applicable to their system extension policies. It was found that nearly all of the utilities had some level of reporting responsibility to their respective regulatory commissions. In Ontario, for example, both Union Gas Limited and Enbridge Gas Distribution are required to report on their expansion activities so that the Ontario Energy Board can review its projects on

an individual and portfolio basis. Furthermore, they are also required to forecast the rate impacts of their expansion plans and present them in rate case filings on a prospective test year basis. FortisBC is required to periodically perform a Rate Impact Analysis on its main extension test and file it with the British Columbia Utilities Commission”

Requests:

- 16.1 Please elaborate further on the type of evaluation by project and by portfolio that the OEB carries out. Please provide the frequency of follow-ups as well as the requested information.

Response:

Black & Veatch

In addition to the OEB reviewing the extent to which gas distribution utilities have been prudently expanding their systems as part of the rate case proceedings, the E.B.O. 188 Decision requires gas distribution utilities to select projects in consultation with the Board Staff on an annual basis for further review. The review consists of financial and environmental monitoring. The financial monitoring involves comparing the utility’s initial 3-year customer attachment forecasts with the actual cumulative number of customers attached after the third year. The review also considers any discrepancies between revenues and costs associated with the actual and projected 3-year customer attachment count.

- 16.2 Please elaborate further on the type of evaluation conducted by Fortis BC. Please provide the frequency of follow-ups as well as the requested information.

Response:

Black & Veatch

FortisBC is required to perform a Rate Impact Analysis (RIA) and submit it to the British Columbia Utilities Commission (BCUC) every 5-7 years. The initial RIA will be filed by FortisBC on June 30, 2020. Additionally, FortisBC is required to report various aspects of its main extension program on an annual basis at the end of the first quarter of the subsequent year. As per the BCUC’s Decision and Order G-147-16, FortisBC is required to report, “The total number of main extensions completed, including the total actual costs for main extensions completed; the forecast PI for all main extensions in aggregate; the total number of customers providing a CIAC, [and] including the total dollar value of CIAC.” As part of this reporting, FortisBC is also required to report on changes approved by the BCUC in the utility’s past rate proceedings related to main extensions, such as reporting on the extent to which it is evaluating projects on a 10 year attachment basis, and the number and dollar value of approved requests for customers taking funds from the System Extension Fund.

- 16.3 Please indicate whether, for utilities in the peer group, it is possible to identify actual consumption and actual revenues for all customers in a specific network expansion project.

Response:

Black & Veatch

While Black & Veatch did not confirm with the gas utilities that were surveyed if they are able to identify actual consumption and actual revenues for all clients in a specific network expansion plan, it is our experience that records maintained by utilities would allow them to identify actual consumption and revenues. This information is typically contained in the utilities' Customer Information Systems, although it may be a manual effort to identify those customers who are related to any particular expansion project. Black & Veatch is not aware if this information is publically available and we have not undertaken an effort to find this information.

Risk Management

- 17. References:** (i) Exhibit B-0278, p. 29
(ii) Exhibit B-0253, p. 18

Preamble:

(i) *“In a perfect world with no uncertainty, the return calculated by the financial forecast would equal the return ultimately realized by the system extension project. However, uncertainties exist and as described in Section 2.1.3, there are a number of inputs that must be estimated, and estimates are inherently uncertain.*

There are two fundamental ways to account for uncertainty in a utility’s system extension policies and practices that utilize a profitability analysis. The additional uncertainty can be included in each cost and revenue input by attempting to better align the estimated inputs with future realized outcomes (i.e., become better at estimating). Alternatively, the threshold for profitability can be adjusted to acknowledge the existence of uncertainty. Unfortunately, the first method; attempting to increase the accuracy of each estimate, is not efficient and can be ineffective. However, the second method explicitly addresses uncertainty by acknowledging that a project may have a higher or lower return than forecasted as time passes.

This also illustrates a paradox associated with the parameters of system extension policies and practices - uncertainty cannot be eliminated it can only be treated differently. For example, the estimate either assumes some level of future customer growth or assumes no future customer growth. Either way, both are assumptions that introduce an element of uncertainty, as you cannot avoid the inclusion of revenue in the utility’s profitability model.”

(ii) **“Contingency and project risks**

The contingency is an amount that is provisioned at the time of estimation and intended to cover the additional costs that may result from uncertainties related to, among other things, engineering advancements, market conditions and field (or execution) conditions, and for which changes could be made to the project.

During the preparation of the class 3 estimations, uncertainties remain with respect to the project definition, both technically and in terms of deadlines and execution conditions on the ground. A contingency must therefore be anticipated in order to mitigate these uncertainties. As the various steps of a project are carried out, the level of related uncertainty decreases, as does the probability of having to use the contingency.

The amount allocated to the contingency in a project’s budget is one of the risk mitigation measures for budget overruns. Not all risks are therefore mitigated by the contingency.

Amounts allocated to the contingency allow for the mitigation of uncertainties and the (accepted) portion of attenuated and non-attenuated risks. The following must be taken into account in determining a project's contingency:

- *project deadline;*
- *market conditions at the time of the call for tender;*
- *environmental conditions;*
- *inherent risks to the type of work; and*
- *technical data; quantity variations; additional activities; methods; productivity.*

As described in the table, a class 3 estimation has a precision level of +/-15%. If a project involves risks that may result in budget overruns of more than 15%, these are taken into account in calculating the contingency. This type of project requires a higher percentage of contingency. The percentage of progress in engineering work allowing [...].”

Requests:

- 17.1 Please indicate how the risk or uncertainty associated to the project's cost is taken into account in your proposal.

Response:

The contingency amount is included in the cost estimation of a project and this amount varies according to the risks and uncertainties that persist at the time of estimating a project's costs. The contingency amount is also included in the estimation of the total cost of the project. It is this total cost that is used in the profitability analysis.

As a contingency amount is included in the project's total cost that is used in the profitability analysis, Gaz Métro is of the opinion that it is not appropriate to identify a PI target that would take into account an uncertainty factor related to the estimation of costs.

- 17.2 To the extent that project cost uncertainty may vary wildly from one project to the next and that this risk of cost fluctuation is not taken into account, please comment on the possibility of identifying a PI target that would take into consideration an uncertainty factor with respect to cost estimation.

Response:

Please refer to the response to question 17.1.

- 17.3 Regarding reference (ii), please indicate where the contingency calculation is located in the profitability analysis of the development plan for projects of less than \$1.5 million and for projects of over \$1.5 million.

Response:

The contingency is included in the estimated costs of each project. More specifically, the contingency is included in the estimation of costs of all projects⁷ that are integrated into the *a priori* development plan filed in Gaz Métro's annual report. Gaz Métro reiterates also that a specific line of the project costs is dedicated to the contingency when an investment project of over \$1.5 million is filed with the Régie.

- 17.4 Using specific examples, please explain how the calculation of the contingency takes into account the risk related to cost estimations.

Response:

For example, the investment project for the connection of the City of Saint-Hyacinthe, for purposes of injection and establishing certain rates (R-3909-2014), which was initially filed with the Régie in October 2014, presents the following data in Exhibit B-055, Gaz Métro-1, Document 1:

- The amount of the estimation of all costs, without a contingency, is \$1,549,652 and the contingency amount allocated to this project is \$232,448, or 15%, for a total cost of \$1,782,100.
- To determine the contingency for each of the 40 elements of the cost estimation (for example: materials, internal and external labor, inspection, rock, excavation, backfilling, reconstruction, etc.), optimistic and pessimistic scenarios were evaluated by a work group, based on the risks and uncertainties related to each of these elements.
- For this project, it was determined that there was no specific risk outside of those considered in the elements of the cost estimation.
- Following this, the @RISK software, by successive iterations (5,000 iterations), analyzed the variation sensibility of the various estimation elements. The result of the @RISK simulation indicated that the contingency required at P85 is of 13.3%. After this analysis, the decision of the work group was to apply a contingency of 15% to this project, given that this was the first execution of a renewable natural gas reception station.

Please also refer to the Pétrumont service line acquisition file (R-3941-2015, Exhibit B-0015, Gaz Métro-2, Document 1, pp. 7 and 8) for details on the calculation of the contingency.

In addition, in R-3825-2012 (B-0015, Gaz Métro-2, Document 1, pp. 8 and 9), Gaz Métro indicates, for four projects of over \$1.5 million (Denis-sur-Richelieu; Thetford Mines; La Corne; Fibrek) the contingency percentage for each project as well as the main factors that impact on the calculation of this percentage.

⁷ Includes project of less than \$1.5 million and of over \$1.5 million.

- 17.5 Please indicate whether it would be appropriate to take into account a cost sensitivity analysis in the evaluation of projects, for both projects of less than \$1.5 million and those of over \$1.5 million.

Response:

Currently, Gaz Métro carries out a cost sensitivity analysis of $\pm 10\%$ for projects of over \$1.5 million filed with the Régie, in compliance with the requirements of article 2 of the *Regulation respecting the conditions and cases where authorization is required from the Régie* with respect to this sensitivity analysis.

For projects of less than \$1.5 million, Gaz Métro does not believe it is appropriate to take into account a cost sensitivity analysis in the evaluation of projects, as a contingency amount is already included in the project's cost estimation. Furthermore, Gaz Métro reiterates that, in its governance process, it foresees carrying out sensitivity analyses on densification potential. Therefore, a cost sensitivity analysis, when a contingency is already included, would greatly burden the evaluation process of several hundred projects. Please see also the response to question 17.1.

18. **Reference:** (i) Exhibit B-0253, p. 45

Preamble:

- (i) "14.9 Please comment on the advisability of producing an explanatory and detailed document on the governance process.

Response:

Gaz Métro believes to have explained and detailed the governance process in Exhibits B-0178 and B-0220. Nevertheless, Gaz Métro has no objection to integrating the information presented in Exhibits B-0178 and B-0220 in a document. As indicated in the introductory commentary, it should be noted that Gaz Métro has filed a new approach to evaluating profitability, which is presented in Exhibit Gaz Métro-7, Document 4."

Request:

- 18.1 Please file a document in which the governance process is explained and detailed.

Response:

Please refer to Schedule Q-18.1.

19. Reference: (i) R-4004-2017, Exhibit B-0012, p. 6

Preamble:

(i) “[...] For the purposes of establishing sales forecasts, Gazifère took into consideration the volumes related to the various types of residences to be constructed in the Project and only the units covered by agreements entered into by the builders and for which the latter are subject to penalties in case of default were considered.”

Requests:

19.1 Please indicate whether Gaz Métro is aware of this type of agreement and whether it uses them. If not, please explain why.

Response:

Yes, Gaz Métro is aware of this type of agreement. Gaz Métro uses contractual levers to protect the investment. It establishes among other things annual minimal obligations and penalties that are based on service line costs and the number of anticipated buildings or customers.

19.2 Please explain the advantages and disadvantages of using a similar approach.

Response:

The main advantage of this type of agreement is to allow Gaz Métro and its customers to protect the investment by establishing an annual minimal obligation or a penalty based on the line costs and the number of buildings or customers provided for under the agreement.

The main disadvantages are of a commercial and administrative nature. The fact that the developer or the builder faces the possibility of having to pay penalties if it does not honor its contractual agreement may result in the delay or cancellation of a project. In addition, establishing this type of agreement requires additional administrative processing.

INTERNAL GOVERNANCE PROCESS

To maximize the positive impacts that extension projects with potential for profitability can have on customers, Gaz Métro has implemented a governance process for each step leading to the realization of its extension projects, from the assessment of overall growth potential to the densification of extension projects.

This document summarizes the aforementioned governance process. It should be noted that the described governance process applies to all extension projects, which therefore specifically include projects whose evaluated *a priori* profitability, based on known elements, falls somewhere between a profitability index (PI) of 0.8 and 1, as well as road repaving and industrial park extension projects.

PHASE 1: EVALUATION OF POTENTIAL

The first phase of the process consists of evaluating the extension project's future densification potential. Depending on the type of extension project (conversion; new development; industrial park; repaving), a number of actions are taken to gather information that will allow Gaz Métro to make an informed decision regarding the project's anticipated profitability:

- A visit of the site:
 - Meeting with the project's identified main customer(s) to evaluate the possibility of immediate conversions or future extensions; and
 - census of the other potential customers using an alternative energy source.

More specifically, site visits afford, among other things, the opportunity to meet with the main customers to evaluate the possibility of immediate conversion or future extensions. Consequently, during these meetings, customers sometimes mention future extensions that might generate load additions. These potential load additions are therefore considered in the potential for future densification.

Site visits can also be used to take a census of other potential customers that use an alternative energy source. Gaz Métro assesses the conversion possibilities presented by these potential customers and estimates consumption based on the consumption calculation rules. This potential for conversion is also taken into consideration in the potential for future densification.

- Summary evaluation of the economic conditions that prevail in the region and the development potential:
 - Discussions with various players in regional development, including municipalities and local development centers (LDC);
 - Consultation of the developer's location diagram and the land use and development plan for the territory;
 - More specifically in the case of industrial park projects, analysis of the area of land available, the type of businesses sought, the existing promotional support and potential leverage effect associated with the availability of natural gas; and
 - Consultation of economic statistics.

The site visits, discussions with various players in regional development, the consultation of the developer's location diagram and the land use and development plan for the territory help identify the vacant lots where potential customers might set up. For these vacant lots, Gaz Métro estimates consumption based on the municipal requirements which, in turn, rely on the percentage of square feet that are to be built using the rules in force. For conservative purposes with respect to the business market, Gaz Métro only takes into consideration air heating¹, presumes that the building will have only one floor, and includes only a portion² of the vacant lots when determining the potential for consumption. The potential of vacant lots is also included in the potential for future densification.

PHASE 2: SENSITIVITY ANALYSIS

Phase 2 of the process consists of conducting sensitivity analyses to evaluate the number of customers in addition to those identified *a priori* will be needed to achieve a profitability rate equal to a PI of 1.

PHASE 3: RECONCILIATION BETWEEN POTENTIAL AND SENSITIVITY ANALYSIS

Phase 3 of the process is to reconcile the evaluation of the potential for future densification and the sensitivity analyses conducted in Phase 2. When an extension project is more likely than not to

¹ Does not include the heating of water and procedures.

² The proportion varies based on the competitive position of the potential customers.

achieve a PI of 1 over time, a formal investment request is filled out and sent by the development advisor to the senior development advisor. The file will include, among other things, a summary of the analyses conducted, the required revenue for the project and the latter's profitability.

PHASE 4: PROJECT AUTHORIZATION

Phase 4 relates to the projects' authorization process. Once the investment request file is received by the senior development advisor, he or she reviews the file to make sure that the profitability has been thoroughly estimated based on the technical solutions retained, and that the relevant information allowing to gauge future expectations is present. The file is then sent for authorization to the Senior Executive, Sales.

PHASE 5: OPERATIONALISATION OF THE DENSIFICATION PHASE

Once an extension project – including those with potential for profitability – is authorized, Phase 5 begins (known as the operationalization of the densification phase). All information gathered in Phase 1 regarding future potential development is therefore sent to the sales force responsible for the system's densification. For Gaz Métro, the densification of extension projects is a *priority* that optimizes the system. In addition, an action plan specific to extension projects with potential for profitability has been developed jointly by the sales and marketing branches so as to favour a more efficient densification of extension projects. A follow-up is then carried out to measure the performance of the defined actions.

In summary, the thorough internal governance process framing the decision to accept (or not accept) extension projects, including those with potential for profitability, ensures that an overall profitability over time exceeding a PI of 1 is achieved, thus contributing to lower rates for customers while giving customers access to natural gas.