CANADA

PROVINCE OF QUÉBEC
DISTRICT OF MONTRÉAL

FILE NO. R-3867-2013
PHASE 3, Subject B

RÉGIE DE L'ÉNERGIE

GENERIC FILE BEARING ON GAZ MÉTRO'S COST ALLOCATION AND RATE STRUCTURE

GAZ MÉTRO

Applicant

-and-

STRATÉGIES ÉNERGÉTIQUES (S.É.)

Intervenor

METHODOLOGY FOR EVALUATING THE PROFITABILITY OF GAZ MÉTRO'S SYSTEM EXTENSION PROJECTS

Brief
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Prepared for:
Stratégies Énergétiques (S.É.)

September 20, 2017

OVERALL RECOMMENDATION

RECOMMENDATION NO. 3-1:

We recommend that the Régie de l'énergie formulate a future approach through its decision on Phase 3, Subject B, of File R-3867-2013, not by "taking note" of the proposed methodology, but rather by requiring that, for each system extension project that is to be submitted to the Tribunal for individual approval in accordance with Section 73 of the Act or as part of a grouped authorization request within a development plan, or whose inclusion in the rate base will be required for the rate case in accordance with Section 49 of the Act, Gaz Métro provide:

- The profitability index (PI) of individual projects, taking into account all projected sales (including contractually assured sales and those resulting from median densification forecasts, specifying assumptions regarding expected market densification), and, for reference purposes only, the profitability index (PI) of individual projects that does not account for contractually assured sales.

- When a project is part of a project portfolio submitted for overall approval, the portfolio's overall profitability indices (PI); a first PI accounting for all projected sales and a second accounting for contractually assured sales only, the latter solely for reference purposes.

- If, in certain cases, Gaz Métro estimates that a project's scale is too small to justify a detailed forecast, it may nevertheless use a parametric density rate. However, this should not be used in every case. Indeed, in many cases, we hope that Gaz Métro will evaluate the potential densification market before initiating a system extension project. Gaz Métro should base its forecast on expectations regarding conversions from more polluting forms of energy, which will occasionally place Gaz Métro in competition with — and targeting the same market as — Hydro-Québec Distribution; these assumptions should be transparent and should be submitted to the Régie and to intervenors. The Régie is also tasked with assessing possible conversion programs for Hydro-Québec Distribution in other files (including File R-4000-2017), and is therefore well placed to judge the thoroughness required by Gaz Métro in researching new system densification markets when it finds itself in competition with Hydro-Québec Distribution's conversion projects.

- The cost categories used in evaluating individual projects will be the same used in evaluating projects grouped by portfolio. Therefore, based on our proposal, the cost categories used in the evaluation should include "*general corporate expenses*", "*general contractor expenses*" and "*distribution network expansion expenses*," which should all be used in evaluating the profitability of individual projects (based on cost allocation principles) and the group to which they belong (the development plan). This is justified for the sake of transparency (to accurately reflect costs) and for the purposes of comparability between individual project evaluations and portfolio evaluations.

- □ The profitability index (PI) will therefore be calculated individually for each project as well as for the portfolio overall. For reference purposes, Gaz Métro will also be required to submit a sensitivity study to the Régie and to intervenors, calculating the profitability index (PI) resulting from its various assumptions, submitting the study

a) For individual projects of over $1.5 million, and

b) In a table for an entire portfolio containing projects under $1.5 million, indicating the profitability indices (PI) resulting from each project's sensitivity study. In this way, if sensitivity studies show that a portfolio's profitability index (PI) is at risk of decreasing below the value of 1, it will be easier to identify the problematic projects. Of course, if, in certain cases, Gaz Métro estimates that the scale of a given project is too small to justify its own sensitivity study, it may still use parametric variations to indicate this sensitivity, although this method should not be used in every case.

- □ The acceptable profitability index (PI) for individual projects of over $1.5 million as well as for portfolios of projects under $1.5 million, is one (1). Gaz Métro will submit a justification for any individual project with a profitability index of less than 1, taking into account Gaz Métro's justification for requiring (or not) a contribution from its customers. Our proposal will ensure the individual profitability of certain projects in cases where this profitability is slightly more difficult to achieve. However, this should not be seen as a methodological issue, but simply as a problem with the profitability of the projects themselves. **If the individual profitability of certain projects is below the threshold of 1, it is crucial that this be transparent.** It will still be possible to accept these projects, **with full knowledge of the evidence**, either by folding projects under $1.5 million into a portfolio of other, more profitable projects, or by making the conscious decision to accept a specific project despite its unprofitability *(e.g. for structural purposes such as the construction of an industrial park, to meet deadlines for acquiring subsidies or street excavation permits, for the purposes of financing energy transition and the conversion of more polluting forms of energy, or for other reasons related to the public interest, government energy policy, sustainable development or equity).* However, a given project's profitability problem cannot be solved by disguising or suppressing certain costs during its evaluation.

We understand that moving forward, the extension projects Gaz Métro chooses to submit for the Régie's approval will consist of projects and project portfolios with probability indices below the indicative scales identified herein, as well as additional projects that will be subject to a justification when these indicative scales have been exceeded.

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MANDATE

Stratégies Énergétiques (S.É.) has engaged our services to draft a brief on the methodology used in evaluating the profitability of system extension projects of Gaz Métro (”the distributor” hereinafter), in relation to File R-3867-2013 Phase 3, Subject B, before the Régie de l’énergie du Québec.

This brief contains analyses and arguments, including legal ones. It has been jointly produced by Jacques Fontaine, Consultant, and Dominique Neuman, Attorney, and is being submitted to *Stratégies Énergétiques* (S.É.) so that the latter may submit it as part of its evidence before the Régie de l’énergie.

2

PRELIMINARY REMARKS REGARDING THE EVIDENCE ON FILE

Gaz Métro's evidence related to this file concerning its methodology for evaluating the profitability of system extension projects consists of exhibits Gaz Métro-7, Documents 1 to 5.

In its initial exhibit of January 20, 2017, B-0178, Gaz Métro-7, Document 1 (and its subsequent addendum, B-0220 revised under B-0273, Gaz Métro-7, Document 2), Gaz Métro had initially presented its criterion for evaluating the profitability of system extension projects as consisting of a minimum acceptable threshold (MAT) based on known sales at the time of the evaluation, this threshold being less than the prospective capital cost (PCC) in order to account for the possibility of additional future system densification sales. This criterion modified the current internal method for evaluating the profitability of Gaz Métro's system extension projects through which a sales projection (including known sales as well as projected densification sales) was established in order to target a profitability equal to or greater than the prospective capital cost (PCC).

On June 28, 2017, however, Gaz Métro presented a new method (B-0277, Gaz Métro-7, Document 4), based on the report of its consultant, Black & Veatch (B-0278, Gaz Métro-07, Document 5 which included a benchmarking study), proposing a criterion for evaluating the profitability of system extension projects consisting of a profitability index (PI), which again was based on known sales at the time of the evaluation, but which was established differently for individual projects as opposed to portfolios of projects in the development plan.

More recently, expert witnesses retained by Gaz Métro, the ROEÉ and OC for the file, namely Russell Feingold, Paul Chernick and William Perea Marcus, submitted a joint report on this topic (Exhibit OC-0047). We were surprised that, in this joint report, the experts did not write their opinions using their own names; rather, they systematically used the names of their respective clients as if they were speaking on their clients' behalf. This appears to go against the rationale for the Tribunal's recognition of these experts, namely the latter's necessary independence. Experts must be at the service of the Tribunal and cannot serve as representatives of their respective clients. They are expected to offer their own, consistent opinions, regardless of which client retains their services. As a rule, clients should not express themselves through these experts.

3

PURPOSE OF THE METHODOLOGY

Gaz Métro is requesting, for Phase 3, Subject B of this file, that the Régie de l'énergie:

> ***TAKE NOTE*** *of the modified methodology for evaluating profitability and the criteria for accepting development projects as described in exhibit Gaz Métro-7, Document 4.* [1]

This conclusion lacks clarity regarding the expected impact of the decision to be rendered by the Régie on this "*notice taken*."

It should be noted that in File R-3998-2017, Gaz Métro vigorously opposed any criterion that would apply to the individual selection of system extension projects, the approval of which is subject to overall approval by portfolio, in the context of the development plan submitted in the rate case. Gaz Métro pleaded that this was an internal management matter, and that the Régie is only informed of project portfolios once a year, except in cases of individual requests for approval of investments over $1.5 million:

> ***1. The first panel exercised its jurisdiction illegally and interfered in the company's operation.***
>
> *[44] Gaz Métro is a private company that in the normal course of business has the authority to acquire assets useful for the operation of its system, provided it exercises prudence in doing so. As a regulatory body, the Régie can monitor the prudence of Gaz Métro's decisions but* ***it is not within its purview to act as a manager, to block business decisions and to replace the opinions of Gaz Métro's managers with its own.***
>
> *[45] The first panel's Conclusions essentially order Gaz Métro to walk away from any extension project whose individual IRR is less than the 5.28% PCC, whether or not these projects were approved by Gaz Métro management. By doing so, Gaz Métro maintains that* ***the first panel interfered in the company's internal operations by taking the managers' place and preventing investments.***

[1] GAZ MÉTRO, File R-3867-2013, Phase 3, Subject B, Exhibit B-0275, Second re-amended application, June 28, 2017, Conclusions.

> *[46] According to Gaz Métro, the Decision contains errors since the decision to approve extension projects is made on an aggregate basis in the rate case through approval of the development plan.* ***The Régie is called upon to decide on the prudence and usefulness of extension projects as a group rather than on an individual basis. There is no obligation to follow a methodology to evaluate the individual profitability of a given extension project or to show achievement of a specific profitability criterion as a prerequisite to its approval.*** [2]
>
> ***3. The first panel erred in imposing a "current methodology" in order to preserve the status quo pending a decision on the proposal***
>
> *[49] According to Gaz Métro, the first panel erred in its assessment of the "current" authorization criteria for extension projects under $1.5 million.* ***The current authorization process for extension projects of less than $1.5 million does not impose any obligation to follow a methodology that evaluates the profitability of an individual extension project of less than $1.5 million included in the group or to demonstrate achievement of a profitability criterion on an individual basis.***
>
> *[50] In Gaz Métro's view, the first panel erred by deeming that the individual profitability criteria established for major projects were required based on past Régie decisions. After reviewing these decisions,[3]26 Gaz Métro concludes that they were intended only for projects over $1.5 million* ***and no decision imposes such criteria on Gaz Métro for extension projects under $1.5 million.***

Furthermore, Gaz Métro also insisted there be no pre-established selection criterion for overall approvals of project portfolios, since the Régie cannot waive its discretionary power to approve projects (even unprofitable ones) or to recognize projects in the rate base, based on their individual circumstances:

2 **RÉGIE DE L'ÉNERGIE**, File R-3998-2017, Decision D-2017-032, March 22, 2017, Parag. 4446. Our emphasis

3 Footnote in the citation: Application 2863-81 Phase II, Decision G-285; Files R-3173-89, Decision D-90-60 and R-3371-97, Decision D97-25.

2. The first panel illegally exercised its jurisdiction by presuming that certain investments did not satisfy the prudent investment criterion

> *[47] Gaz Métro argues that by deciding that all extension projects under $1.5 million carried out in 2016-2017 will have to respect the current PCC of 5.28%,* ***the first panel deprived Gaz Métro of its right to apply to the Régie for approval for extension projects under $1.5 million that do not achieve the PCC or limits its discretion to approve such a potential application****.*
>
> *[48] In so doing, Gaz Métro is of the opinion that the first panel committed a serious jurisdictional error that invalidates the Decision.* [4]
>
> *[51] As well, contrary to the first panel's Conclusions,* ***the "conditions approved by the Régie" for large projects do not require that the PCC be achieved in all circumstances. Instead, they provide the necessary flexibility, in particular, when the PCC is not achieved but there is evidence of anticipated profitability.*** [5]

Gaz Métro pleaded that project portfolios are approved and recognized in the rate base ***"on an aggregate forecast basis"*** and that the Régie must always be able to exercise its discretion with respect to their prudence and usefulness. In addition, the Régie cannot systematically force Gaz Métro to require contributions from its customers to reach a given profitability threshold.

> *[60] First, Gaz Métro alleges that article 4.3.4 of the Conditions of Service does not require a financial contribution but rather that the distributor "may, on entering into the contract, agree with the customer on a financial contribution payable by the customer."*[6] *According to Gaz Métro, this provision gives it discretion in this regard.*
>
> *[61] Second, in keeping with this specifically conferred discretion, article 4.3.4 of the Conditions of Service* ***cannot logically impose an obligation to immediately achieve the PCC if Gaz Métro believes that the investment will be profitable, particularly for its long-term growth potential.***

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4 **RÉGIE DE L'ÉNERGIE**, File R-3998-2017, Decision D-2017-032. March 22, 2017, Parag. 4748. (Our emphasis)

5 **RÉGIE DE L'ÉNERGIE**. File R-3998-2017, Decision D-2017-032. March 22, 2017. Parag. 51. (Our emphasis)

6 Footnote in the citation: Page 29, para. 93 of the Decision [N.D.L.R. : D-2016-191]

[62] Third, article 4.3.4 of the Conditions of Service must be interpreted in accordance with section 1 of the Regulation respecting the conditions and cases where authorization is required from the Régie de l'énergie[7] (the Regulation) and the regime applicable to extension projects under $1.5 million. With respect to these projects, the Régie does not approve any specific profitability conditions because the projects are deemed "prudently acquired" and "useful" ***<u>on an aggregate forecast basis</u>*** *during the rate case, even though these projects are not individualized.[8]*

* * *

In its final decision on File R-3998-2017, the Régie de l'énergie confirmed **that the Régie's current rules maintain the Régie's discretion, do not require Gaz Métro to reach a profitability threshold equal to or greater than the prospective capital cost and do not impose on Gaz Métro the obligation to require a contribution from the customer in cases of insufficient profitability.**

[95] The grounds for the review therefore stem from Gaz Métro's interpretation of the Decision, which is that the first panel imposed a profitability criterion on all system extension projects under $1.5 million, taken individually.

[96] However, in the review panel's view, the first panel did not go that far in paragraph 91 of its Decision. ***<u>The review panel cannot accept the underlying reasons for Gaz Métro's interpretation, namely that paragraph 91 of the Decision requires Gaz Métro to respect a single criterion, i.e. applying the PCC to every investment project of under $1.5 million.</u>***

[97] ***<u>The Decision does not expressly state that Gaz Métro absolutely must respect a profitability criterion before carrying out each system extension project individually.</u>*** *Rather, paragraph 91 of the Decision is more of a cautionary note, calling on Gaz Métro to respect the methodology in effect for this type of investment, including, in particular but not limited to, achievement of the PCC.* ***<u>According to the review panel, nothing prevents Gaz Métro from applying the single PCC achievement criterion for each investment project under $1.5 million.</u>***

7 Footnote in the citation: CQLR, c. R-6.01, r. 2.

8 **RÉGIE DE L'ÉNERGIE**, File R-3998-2017, Decision D-2017-032. March 22, 2017, Parag. 6062. (Our emphasis)

[98] Nothing indicates that the first panel intended to change Gaz Métro's approach, quite the contrary. Had the first panel truly intended to change the long-standing approach used by Gaz Métro for extension projects under $1.5 million, it would certainly not have insisted on the importance of respecting the methodology currently in effect. Moreover, had this been the first panel's intention, it would have made changes to the current practices for the purpose of regulatory closure, which is clearly not the case.

[99] Lastly, the review panel cannot conclude from paragraphs 91 and 92 of the Decision that extension projects under $1.5 million whose IRR is less than the PCC would automatically be deemed imprudent and excluded from the rate base, as Gaz Métro claims. Such an interpretation would not be consistent with the intent of the Decision. The review panel finds that there is no specific conclusion in the contested paragraphs ***<u>preventing Gaz Métro from subsequently requesting that extension projects with an IRR less than the PCC be included in the rate base.</u>***

[100] With respect to article 4.3.4 of Gaz Métro's Conditions of Service, the review panel is of the opinion that it is a logical continuation of the first panel's reminder in paragraph 91 since the rate provision addresses the conditions that apply when an investment project will not generate the desired return.

[101] While it is true that the first panel stated that Gaz Métro "must" seek a contribution instead of using the word "may," it is clear, based on the overall wording of the Decision, that it did not intend to change the method currently used by Gaz Métro. Thus, even if the review panel were to conclude that an error was made, it would not be likely to invalidate the Decision.

[102] In light of the foregoing, the review panel deems that the contested Conclusions cannot be interpreted as requiring each investment project under $1.5 million to meet the PCC profitability criterion. Rather, these Conclusions seek to ensure that Gas Métro continues to use its long-standing methodology until its proposal is examined in a rate case. [9]

[9] **RÉGIE DE L'ÉNERGIE**, File R-3998-2017, Decision D-2017-032, March 22, 2017, Parag. 95102. Our emphasis. Paragraph 102 is already bolded in the text.

* * *

In this context, we asked Gaz Métro about the scope of the question it is submitting to the Régie for a decision with this file:

QUESTION 3-1 OF SÉ-AQLPA TO GAZ MÉTRO

If your project concerning the methodology for evaluating extension projects is approved with this file, how will this affect the Régie's current flexibility in approving (or recognizing as prudently acquired) unprofitable projects? Are you not impairing this flexibility?

RESPONSE 3-1 FROM GAZ MÉTRO TO SÉ-AQLPA

It is precisely out of a concern to remain consistent with the position outlined in file R-3998-2017 that ***Gaz Métro is not asking the Régie to "approve" the methodology for evaluating the profitability of system extension projects, but rather that it "take note" of it. Gaz Métro is of the opinion that its application, as it is worded, will not impair the flexibility mentioned by the intervenor.*** *In this regard, Gaz Métro refers to its response to question 1.1 of the request for information no. 2 from the IGUA in Exhibit Gaz Métro-9, Document 2.* [10]

The following is the IGUA's question and the Distributor's response:

QUESTION 1.1A FROM THE IGUA TO GAZ MÉTRO

At the time of the 2017 rate case, Gaz Métro asked the Régie to approve a methodology to accept extension projects with an expectation of profitability (ref (i)). In this file, Gaz Métro is asking the Régie to note the methodology for analyzing project profitability (ref (ii)). Please confirm or correct the IGUA's understanding that ***the distributor is not seeking approval of a change to the methodology currently in place.*** *In the affirmative, please explain why the proposed change to the methodology no longer requires Régie approval, only that it take note of the change.*

10 **GAZ MÉTRO**, File R-3867-2013, Phase 3, subject B, Exhibit B-0271, Gaz Métro 9, Document 7, Response 3-1 to SÉ-AQLPA, pages 1 to 3. Our emphasis.

RESPONSE 1.1A FROM GAZ MÉTRO TO THE IGUA

Gaz Métro confirms that, as outlined in its application (B-0176), it is asking that the Régie "take note" of the methodology for evaluating the profitability of system extension projects. ***Gaz Métro believes that the determination to apply (or not) this type of methodology is based on business decisions made internally by its managers, in the course of its business operations. Therefore, Gaz Métro respectfully submits that the Régie's approval of the methodology is not required.*** *This is consistent with the position outlined by Gaz Métro in File R-3998-2017. Therefore, as indicated in the introductory note to Exhibit B-0178, Gaz Métro-7, Document 1, the evaluation of the application in this file is to serve as a response to the follow-up required by the Régie in decisions D-2016-090 and D-2016-169. Furthermore, the terms "take note" are currently used by Gaz Métro in the conclusions of its applications in addressing the follow-ups required by the Régie.*

In addition, as underlined in response to question 1.13 of the request for information no. 9 from the Régie (Gaz Métro-9, Document 1), ***The Régie may, as part of the examination of rate applications, rule on the usefulness and prudence of the investments that Gaz Métro will have made in applying this methodology.***[11]

* * *

In this context, we recommend clarifying the scope of the decision to be rendered on this file. Stating that the Régie is only to "take note" of the methodology and that its discretionary power remains intact does not explain why the Régie has been called upon to render a decision in this case.

The risk of a misunderstanding regarding the scope of the decision is compounded, since Gaz Métro stated that for its new methodology, it drew on the methodologies of Fortis BC, Union Gas and Enbridge, which, based on evidence submitted by the distributor, **were reportedly created in a context in which regulators imposed constraints**. [12]

11 **GAZ MÉTRO**, File R-3867-2013, Phase 3, subject B, Exhibit B-0256, Gaz Métro 9, Document 2, Response 1-1a to the IGUA, pages 1 and 2. Our emphasis.

12 **GAZ MÉTRO**, File R-3867-2013, Phase 3, subject B, Exhibit B-0178, Gaz Métro 7, Document 5, Black and Veatch benchmarking report, Review of methodologies for evaluating the profitability of System extension, Table 3, pages 18 and 19,

As outlined later in this brief, we therefore propose that rather than merely “taking note” of the methodology, the Régie’s decision should express more precisely how the methodology is to be used.

4

OUR OVERALL PROPOSAL

Our overall recommendation, presented in this brief, is as follows:

RECOMMENDATION NO. 3-1:

We recommend that the Régie de l'énergie formulate a future approach through its decision on Phase 3, Subject B, of File R-3867-2013, not by "taking note" of the proposed methodology, but rather by requiring that, for each system extension project that is to be submitted to the Tribunal for individual approval in accordance with Section 73 of the Act or as part of a grouped authorization request within a development plan, or whose inclusion in the rate base will be required for the rate case in accordance with Section 49 of the Act, Gaz Métro provide:

- The profitability index (PI) of individual projects, taking into account all projected sales (including contractually assured sales and those resulting from median densification forecasts, specifying assumptions regarding expected market densification), and, for reference purposes only, the profitability index (PI) of individual projects that does not account for contractually assured sales.

- When a project is part of a project portfolio submitted for overall approval, the portfolio's overall profitability indices (PI); a first PI accounting for all projected sales and a second accounting for contractually assured sales only, the latter solely for reference purposes.

- If, in certain cases, Gaz Métro estimates that a project's scale is too small to justify a detailed forecast, it may nevertheless use a parametric density rate. However, this should not be used in every case. Indeed, in many cases, we hope that Gaz Métro will evaluate the potential densification market before initiating a system extension project. Gaz Métro should base its forecast on expectations regarding conversions from more polluting forms of energy, which will occasionally place Gaz Métro in competition with — and targeting the same market as — Hydro-Québec Distribution; these assumptions should be transparent and should be submitted to the Régie and to intervenors. The Régie is also tasked with assessing possible conversion programs for Hydro-Québec Distribution in other files (including File R-4000-2017), and is therefore well placed to judge the thoroughness required by Gaz Métro in researching new system densification markets when it finds itself in competition with Hydro-Québec Distribution's conversion projects.

□ The cost categories used in evaluating individual projects will be the same used in evaluating projects grouped by portfolio. Therefore, based on our proposal, the cost categories used in the evaluation should include "*general corporate expenses*", "*general contractor expenses*" and "*distribution network expansion expenses*," which should all be used in evaluating the profitability of individual projects (based on cost allocation principles) and the group to which they belong (the development plan). This is justified for the sake of transparency (to accurately reflect costs) and for the purposes of comparability between individual project evaluations and portfolio evaluations.

□ The profitability index (PI) will therefore be calculated individually for each project as well as for the portfolio overall. For reference purposes, Gaz Métro will also be required to submit a sensitivity study to the Régie and to intervenors calculating the profitability index (PI) resulting from its various assumptions, submitting the study

a) For individual projects of over $1.5 million, and

b) In a table for an entire portfolio containing projects under $1.5 million, indicating the profitability indices (PI) resulting from each project's sensitivity study. In this way, if sensitivity studies show that a portfolio's profitability index (PI) is at risk of decreasing below the value of 1, it will be easier to identify the problematic projects. Of course, if, in certain cases, Gaz Métro estimates that the scale of a given project is too small to justify its own sensitivity study, it may still use parametric variations to indicate this sensitivity, although this method should not be used in every case.

□ The acceptable profitability index (PI) for individual projects of over $1.5 million as well as for portfolios of projects under $1.5 million, is 1. Gaz Métro will submit a justification for any individual project with a profitability index of less than 1, taking into account Gaz Métro's justification for requiring (or not) a contribution from its customers. Our proposal will ensure the individual profitability of certain projects in cases where this profitability is slightly more difficult to achieve. However, this should not be seen as a methodological issue, but simply as a problem with the profitability of the projects themselves. **If the individual profitability of certain projects is below the threshold of 1, it is crucial that this be transparent.** It will still be possible to accept these projects, with full knowledge of the evidence, either by folding projects under $1.5 million into a portfolio of other, more profitable projects, or by making the conscious decision to accept a specific project despite its unprofitability *(for structural purposes such as the construction of an industrial park, to meet deadlines for acquiring subsidies or street excavation permits, for the purposes of financing energy transition and the conversion of more polluting forms of energy, or for other reasons related to the public interest, government energy policy, sustainable development or equity).* However, a given project's profitability problem cannot be solved by disguising or suppressing certain costs during its evaluation.

We understand that moving forward, the extension projects Gaz Métro chooses to submit for the Régie's approval will consist of projects and project portfolios with probability indices below the indicative scales identified herein, as well as additional projects that will be subject to a justification when these indicative scales have been exceeded.

5

WHICH FORECAST REVENUES ARE TAKEN INTO ACCOUNT IN EVALUATING SYSTEM EXTENSION PROJECTS AND WHAT IS THE ACCEPTABLE PROFITABILITY INDEX (PI)?

To date, in evaluating its system extension projects, Gaz Métro has taken into account contractually assured revenues as well as the forecast of revenues resulting from the expected densification of the network over a specific period.

In this file, like in its method proposed in January 2017 and its new method proposed in June 2017, Gaz Métro proposes to take into account contractually assured revenues only, and not those resulting from expected densification. However, these additional revenues will be indirectly taken into account parametrically, since, for all extensions in Québec where Gaz Métro sees a possible densification, the acceptable profitability index (PI) of the project will be reduced (from 1 to 0.8). Expert Paul Chernick instead proposes classifying projects according to two parametric categories: projects where “significant” densification is possible and those where “average” densification is possible, with two different profitability index reduction levels. [13] In every case, if little or no densification were perceived to be possible, the project’s acceptable profitability index (PI) would be 1. In addition, in evaluating projects, in order to account for the forecast error and the sensitivity to various risks, the portfolio combining these projects would have a higher profitability index (PI) (1.1 or 1.3, depending on the horizon set by various experts).

We believe this method weakens the quality of project evaluations and of their amalgamation into portfolios. System extension projects throughout Québec cannot all be placed into only two or three categories based on their densification prospects. Furthermore, the adjustment made for risk sensitivity and forecast errors should not be the same for all of Québec.

We believe it would be preferable to preserve the current method, which, for each system extension project, permits the use of a sales forecast that includes contractually assured sales as well as those resulting from the median densification forecast (although for reference purposes, Gaz Métro may be required to submit an evaluation based solely on contractual sales in order to better distinguish contractually assured sales from those that are not

13 **Paul CHERNICK, Russell FEINGOLD, William Perea MARCUS**, File R-3867-2013, Phase 3, subject B, Exhibit OC-0047, Joint Report, September 15, 2017, page 7, line 3.

guaranteed). If, in certain cases, Gaz Métro estimates that a project's scale is too small to justify a detailed forecast, it may nevertheless use a parametric density rate. However, this should not be used in every case. In many cases, we hope that Gaz Métro will evaluate the potential densification market before initiating a system extension project. Gaz Métro should base its forecast on expectations regarding conversions from more polluting forms of energy, which will occasionally place Gaz Métro in competition with — and targeting the same market as — Hydro-Québec Distribution; these assumptions should be transparent and should be submitted to the Régie and to intervenors. The Régie is also tasked with assessing possible conversion programs for Hydro-Québec Distribution in other files (including File R-4000-2017), and is therefore well placed to judge the thoroughness required by Gaz Métro in researching new system densification markets when it finds itself in competition with Hydro-Québec Distribution's conversion projects.

According to our proposal above, the acceptable profitability index (PI) based on contractual revenues and revenues resulting from the median densification forecast will be 1 for each individual project of over $1.5 million as well as for portfolios of projects under $1.5 million (in each case, taking into account Gaz Métro's justification for requiring (or not) a contribution from its customers.

The profitability index (PI) will therefore be calculated individually for each project as well as for the portfolio overall. For reference purposes, Gaz Métro will also be required to submit a sensitivity study to the Régie and to intervenors, calculating the profitability index (PI) resulting from its various assumptions, submitting the study

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- And in a table for an entire portfolio containing projects under $1.5 million, indicating the profitability indices (PI) resulting from each project's sensitivity study. In this way, if sensitivity studies show that a portfolio's profitability index (PI) is at risk of decreasing below the value of 1, it will be easier to identify the problematic projects. Of course, if, in certain cases, Gaz Métro estimates that the scale of a given project is too small to justify its own sensitivity study, it may still use parametric variations to indicate this sensitivity, although this method should not be used in every case.

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WHAT COSTS ARE TO BE TAKEN INTO ACCOUNT IN EVALUATING SYSTEM EXTENSION PROJECTS?

We disagree with Gaz Métro’s proposal[14] (supported by the joint report of experts Chernick, Feingold and Marcus [15]), according to which the costs accounted for in evaluating the profitability of individual extension projects are different that those accounted for in an overall evaluation of a portfolio of such projects (the development plan).

This would undermine the ability of the Régie, Gaz Métro and intervenors to compare the profitability of individual projects with that of the group to which they belong (the development plan).

This could give rise to an absurd situation where all projects, taken individually, are found to be profitable, surpassing the profitability index (PI) of 1, 1.1 or 1.3, while the group to which they belong, evaluated overall, is found to be unprofitable, with a profitability index below these thresholds.

Instead, we propose a return to Gaz Métro’s current method, which it proposed in January 2017, under which the same costs are taken into account both when evaluating the profitability of individual projects and when evaluating the group to which they belong (the development plan). Gaz Métro’s current method and its initial proposal in January 2017 included “*general corporate expenses”* and “*general contractor expenses”*; to this, we propose to add “*distribution network expansion expenses*” (dividing them in accordance with cost allocation principles).

As mentioned above, the acceptable profitability index (PI), both for individual projects of over $1.5 million and for portfolios of projects under $1.5 million, is 1. Gaz Métro will submit a justification for any individual project with a profitability index of less than 1, taking into account

14 **GAZ MÉTRO**, File R-3867-2013, Phase 3, subject B, Exhibit B-0277, Gaz Métro 7, Document 4, page 6.

15 **Paul CHERNICK, Russell FEINGOLD, William Perea MARCUS**, File R-3867-2013, Phase 3, subject B, Exhibit OC-0047, Joint Report, September 15, 2017, page 7, line 1.

Gaz Métro's justification for requiring (or not) a contribution from its customers. Our proposal would ensure the individual profitability of certain projects in cases where this profitability is slightly more difficult to achieve. This should not be seen as a methodological issue, but simply as a problem with the profitability of the projects themselves. **If the individual profitability of certain projects is below the threshold of 1, it is crucial that this be transparent.** It will still be possible to accept these projects, **with full knowledge of the evidence**, either by folding projects under $1.5 million into a portfolio of other, more profitable projects, or by making the conscious decision to accept a specific project despite its unprofitability *(for structural purposes such as the construction of an industrial park, to meet deadlines for acquiring subsidies or street excavation permits, for the purposes of financing energy transition and the conversion of more polluting forms of energy, or for other reasons related to the public interest, government energy policy, sustainable development or equity).* However, a given project's profitability problem cannot be solved by disguising or suppressing certain costs during its evaluation.

Therefore, based on our proposal, the cost categories used in the evaluation should include "*general corporate expenses*", "*general contractor expenses*" and "*distribution network expansion expenses*," which should all be used in evaluating the profitability of individual projects (based on cost allocation principles) and the group to which they belong (the development plan).

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CONCLUSION

We invite the Régie de l'énergie to accept the recommendations in this report, which are also reproduced in its executive summary.