

**ÉNERGIR, L.P.’S (ÉNERGIR’S) RESPONSES TO REQUEST
FOR INFORMATION NO. 14 FROM THE RÉGIE DE L’ÉNERGIE (LA RÉGIE) TO ÉNERGIR WITH
RESPECT TO THE GENERIC CASE ON
COST ALLOCATION AND RATE STRUCTURE**

- 1. References:**
- (i) R-4020-2017, exhibit [B-0028](#), response 1.1, p. 4;
 - (ii) R-4020-2017, exhibit [B-0032](#), p. 2;
 - (iii) R-3987-2017, exhibit [B-0276](#);
 - (iv) Decision D-97-25, R-3371-97, p. 6.

Preamble:

- (i) In answer 1.1, Énergir sets out the following table

Exemple: Structure et coût du capital moyen pondéré (par hypothèse)

	Structure	CCP	Impôt	CCP après impôt	Impôt	CCP avant impôt
Dettes	54%	2,970%	26,73%	2,176%		2,970%
Équité	46%	8,318%		8,318%	26,73%	11,352%
		<u>5,430%</u>		<u>5,001%</u>		<u>6,826%</u>

- (ii) “Lastly, in the framework of decision D-2017-094, the Régie approved a PCC of 5.43% for the 2017-2018 rate year. Note, however, that this is the before tax PCC, as shown in exhibit B-0276, Gaz Métro-11, Document 8, of case R-3987-2016. Énergir then used this before-tax PCC of 5.43% to calculate the after-tax PCC of 5.01%, which is used in evaluating capital projects for the 2017-2018 rate year, pursuant to decision D-97-25.”

- (iii) In the 2017-2018 rate case, Énergir submitted the details on the prospective capital cost calculation for 2018.

- (iv) “To assess a project’s profitability, GMLP plans to compare the internal rate of return (IRR) generated by the project with the prospective capital cost, as defined earlier, but introducing the concept of after-tax prospective capital cost. This is necessary given that the cash flow used in calculating the IRR does not incorporate the concept of the tax savings associated with financial costs.

The data submitted in exhibit Gmi-1, document 3, shows that, for fiscal 1996-1997, the prospective capital cost for evaluating capital projects would have been 9.49% or 7.82% after tax.” [our emphasis]

Requests:

- 1.1 Please submit the parameters and calculations used to obtain the 9.49% prospective capital cost and 7.28% after-tax prospective capital cost as mentioned in reference (iv).

Please provide the detail on the calculations for each of the components (debt, preferred shares and common shares).

Answer:

	Structure ¹	PCC ¹	Tax ²	After-tax PCC
Debt	53.97%	8.38%	36.90%	5.29%
Preferred shares	7.53%	7.15%		7.15%
Common shares	38.50%	11.50%		11.50%
		9.49%		7.82%

- 1.2 Please confirm whether the prospective capital cost, as set out in reference (iii) is “before” or “after” tax for each of the following components:

- Debt;
- Preferred shares;
- Common shares.

Answer:

Debt: 2.97% before tax

Preferred shares: 5.29% after tax

Common shares: 8.90% after tax

- 1.3 Insofar as any of the debt or equity components are established on a “before” or “after” tax basis in establishing the prospective capital cost, please describe whether the prospective capital cost, as set out in reference (iii), must be considered to be partially or entirely “after tax.” Please explain.

¹ R-3371-97, GMi-01 Document 3.

² R-3371-97, GMi-01 Document 4.

Please state whether the approach cited in reference (iv) considers a prospective capital cost to be partially or entirely “after tax.”

Answer:

The prospective capital cost, as set out in reference (iii), must be considered “mixed” (partially “before tax” and partially “after tax”), given that the cost of the debt is “before tax” while the cost of equity is “after tax.” However, on some occasions, in contrast with the “after tax” PCC, Énergir may have characterized this “mixed” PCC as a “before-tax” PCC.

- 1.4 Please confirm that the term “before-tax PCC,” as cited in reference (ii), represents the before-tax PCC for the debt portion and after-tax PCC for the equity portion.

Answer:

Énergir confirms this. The PCC that is characterized as “before tax” in reference (ii) is in fact a “mixed” PCC (partially “after tax” and partially “before tax”).

- 1.5 Please confirm that the term “*after-tax PCC*,” as cited in reference (ii), represents the after-tax PCC for the debt portion and after-tax PCC for the equity portion.

Answer:

Énergir confirms this.

2. **References:**
- (i) R-4020-2017, exhibit [B-0028](#), p. 5, answer 1.2;
 - (ii) R-4020-2017, exhibit [B-0032](#), Énergir preamble, p. 3;
 - (iii) R-3991-2017, exhibit [B-0010](#);
 - (iv) R-3958-2015, exhibit [B-0017](#);
 - (v) R-3937-2015, exhibit [B-0011](#);
 - (vi) R-3851-2013, exhibit [B-0007](#);
 - (vii) R-3825-2012, exhibit [B-0009](#);
 - (viii) R-3785-2012, exhibit [B-0008](#);
 - (ix) R-3785-2012, exhibit B-0016 (Excel file – cannot be consulted).

Preambles:

(i) “[...] if the two approaches were truly interchangeable, the same result would be obtained using either approach. Unfortunately, because such interchangeability is not possible given the parameters used and the way in which project cash flows are evaluated, the debate boils down to determining which approach is the “right” one.”

Here, Énergir reiterates that the classic approach to calculating project cash flow (by excluding the tax savings on interest) is the one that should be used. It makes it possible to assess a project's IRR without considering the financing structure that would eventually be selected (debt-equity mix) and without considering the cost of eventual debt, the behaviour of that debt over time, the tax advantages it provides, and the desired return for project shareholders. To determine whether the resulting IRR is sufficiently profitable, i.e. if the cash flow is sufficient to cover the cost of the debt (after the tax savings) and desired return on equity (also after tax), it then simply has to be compared with the weighted cost of after-tax prospective capital.” [Our emphasis]

(ii) “As mentioned previously, in the framework of decision D-97-25, the Régie approved the use of the after-tax PCC in evaluating the profitability of capital projects without incorporating the tax savings on interest on debt in the project cash flow.

Therefore, using the before-tax PCC and incorporating the notion of a tax savings on financial costs in the project cash flow would constitute a change to the method approved by the Régie.

Here, Énergir maintains that such a modification would modify the evaluation of the cost effectiveness of all of Énergir's development projects and would thus have to be dealt with in the framework of a rate case or in case R-3867-2013, phase 3B, now underway. [Our emphasis]

(iii) Calculation of the revenue requirement submitted in case R-3991-2016 (Drummondville project).

(iv) Calculation of the revenue requirement submitted in case R-3958-2015 (Asbestos project).

(v) Calculation of the revenue requirement submitted in case R-3937-2015 (Bellechasse project).

(vi) Calculation of the revenue requirement submitted in case R-3851-2013 (Côte de Terrebonne project).

(vii) Calculation of revenue requirement submitted in case R-3825-2012 (Saint-Félicien project).

(viii) Calculation of revenue requirement submitted in case R-3785-2012 (La Corne project).

**Request for marginal costs for long term service delivery applied to
the profitability analysis, R-3867-2013**

(ix) Énergir is submitting a file that contains three Excel files that reproduce the calculations done by its internal software, showing the inputs used to calculate results for the purposes of establishing the variation in the contribution considering the achievement of the 7.52% rate of return (appendices 1 to 3) and revenue requirement for these three scenarios (appendices 4 to 6).

Requests:

2.1 Please indicate whether the “*Weighted prospective capital cost*” presented in each of references (iii) to (viii) is “before” or “after” tax for each component of the prospective capital.

If applicable, please submit the details required to establish the “*Before-tax prospective capital cost*” and “*After-tax prospective capital cost*” associated with each of references (iii) to (viii).

Answer:

The “*Weighted prospective capital cost*” presented in each of references (iii) to (viii) corresponds to the “mixed” prospective capital cost approved by the Régie in rate cases. In each case, the PCC comprises the “before-tax” cost of the debt, the “after-tax” cost of preferred shares and the “after-tax” cost of common shares.

The details for the prospective capital cost calculation were set out in the following exhibits:

- (iii) R-3970-2016, B-0200, Gaz Métro-7, Document 8;
- (iv) R-3879-2014, B-0617, Gaz Métro-108, Document 8;
- (v) R-3837-2013, B-0119, Gaz Métro-10, Document 8; and
- (vi) to (viii) R-3752-2011, Gaz Métro-7, Document 8

Here are the details on the calculation of the “mixed” and “after-tax” prospective capital costs for each reference:

(iii)	Structure	PCC	Tax	After-tax PCC
Debt	54.00%	2.82%	26.90%	2.06%
Preferred shares	7.50%	4.44%		4.44 %
Common shares	38.50%	8.90%		8.90 %
		<u>5.28%</u>		<u>4.87%</u>

**Request for marginal costs for long term service delivery applied to
the profitability analysis, R-3867-2013**

(iv)	Structure	PCC	Tax	After-tax PCC
Debt	54.00%	3.03%	26.90 %	2.21%
Preferred shares	7.50%	4.75%		4.75 %
Common shares	38.50%	8.90%		8.90 %
		5.43%		4.98%

(v)	Structure	PCC	Tax	After-tax PCC
Debt	54.00%	3.60%	26.90%	2.63%
Preferred shares	7.50%	5.01%		5.01 %
Common shares	38.50%	8.90 %		8.90 %
		5.75%		5.22%

(vi) to (viii)	Structure	PCC	Tax	After-tax PCC
Debt	54.00%	4.60%	27.28%	3.35%
Preferred shares	7.50%	6.20%		6.20 %
Common shares	38.50%	8.90%		8.90%
		6.38%		5.70%

2.2 Please indicate whether, in the framework of the financial analyses and required revenue calculation submitted in support of network extension projects, as presented in references (iii) to (viii), Énergir respectively presented the “after-tax PCC” (after-tax for equity and the cost of the prospective debt) for the purpose of evaluating project profitability. Please provide details.

If not, please state why Énergir did not submit the “after-tax PCC” parameters (after tax for equity and cost of prospective debt) for the purpose of evaluating project profitability and whether, in Énergir’s opinion, evaluating a project on the basis of the parameter submitted and available to the Régie, i.e. the “before-tax PCC” (after tax for equity and before tax for

the cost of prospective debt) constitutes a change to methodology with respect to the citation in (ii) and in compliance with decision D-97-25.

Answer:

Énergir did not present the “after-tax PCC” in any of the cases presented in references (iii) to (viii). Note that the “after-tax” PCC is never used in the calculations done to determine the project’s IRR. It is only used to determine the minimum rate of return on a project for it to be considered sufficiently cost effective. Here, Énergir notes that the establishment of a project’s revenue requirement, and the calculation of the rate breakeven point and rate impact of a project use the “mixed” prospective capital cost approved by the Régie in rate cases.

Énergir reiterates that using the “after-tax” PCC as a breakeven point has not been applied for many years, in spite of decision D-97-25 and financial logic. As soon as Énergir became aware of this factor in the framework of this case (see the answer to questions 7.2 and 7.3 in request for information no. 2 from the OC in this matter (B-0293, Gaz Métro-9, Document 12), it rectified the situation in the capital projects filed since then, in particular the network extension projects in the des Appalaches and de Beauce-Sartigan RCMs (R-4020-2017), Saint-Marc-des-Carières (R-4021-2017) and Laval (R-4033-2018). Moreover, starting with the 2018-2019 rate case, to be submitted at the end of April, Énergir will present to the Régie an exhibit that sets out the after-tax PCC, as Gazifère does (R-4003-2017, B-0259).

- 2.3 Please confirm that, in the framework of the La Corne project (case R-3785-2012), Énergir incorporated the notion of the tax savings on financial costs in the project cash flow, as presented in the reference file (ix), and in the project’s financial analysis.

Please elaborate on the approach used for the La Corne project, with respect to the approved method, as cited in the citation in (ii).

Answer:

No. The La Corne project used the same approach as the other projects presented as reference. Specifically, the La Corne project excluded the tax savings related to the deductibility of interest from the cash flow used to calculate the IRR. Consistent with decision D-97-25, the project’s IRR would have had to be compared with the project’s “after-tax” PCC.

- 2.4 Complementary to the answer to the previous question, please state whether the approach used in the framework of the La Corne project constitutes a change to the approach that

consists in “using the after-tax PCC to assess the profitability of capital projects without incorporating the tax savings on interest on debt in the project cash flow,” as mentioned in reference (ii).

Answer:

No, the approach used in the La Corne project does not differ from the approach Énergir recommends for analyzing the profitability of its projects. In particular, the methodology Énergir has used for many years to calculate its projects’ cash flows is the methodology used for the La Corne project. More specifically, the tax savings from interest deductibility is excluded from cash flow.

- 2.5 Referring to the citation in reference (i), with respect to the statement that “*the debate boils down to determining which approach is the “right” one*” and considering the approaches applied and used in the context of the cases cited in references (iii) to (viii), please state whether Énergir would object to using one or the other approach in the framework of evaluating project profitability. Please explain.

Answer:

Énergir reiterates that it privileges the classic approach referred to in (i) and sees no benefit to changing the approach to a different, non-conventional approach, which for a variety of reasons makes theoretical equivalence difficult in practice.

The recognized approach for the financial evaluation of the project involves evaluating the internal rate of return generated by a cash flow that is treated as “debt free,” and which is therefore insensitive to a project's financing structure, and then comparing it with the weighted average cost of capital after tax. The after-tax PCC reflects the project’s financing cost, which must include the tax savings on the project's interest if it was financed based on Énergir’s current capital structure (5.01%). Therefore, in project evaluation, all projects that offer the company an internal rate of return higher than the rate required by all of its lenders (weighted average cost of capital after corporate tax) increase the company's value, and should therefore be approved. Here, Énergir refers to the following sources:

- Copeland, Thomas E. and Weston, J. Fred (1988), *Financial Theory and Corporate Policy (Third Edition)*, Addison-Wesley Publishing Company, pages 36 to 41, *Cash Flows for Capital Budgeting Purposes*.
- <http://www.lecfomasque.com/cout-moyen-pondere-capital/>
- <https://www.bdc.ca/en/articles-tools/entrepreneur-toolkit/templates-business-guides/glossary/pages/cost-of-capital.aspx>

- <http://www.ressourcesentreprises.org/blog/2012/05/quest-ce-que-le-cout-moyen-pondere-du-capital-cmpc/>
- <https://www.investopedia.com/walkthrough/corporate-finance/4/npv-irr/internal-rate-return.aspx>
- <https://www.investopedia.com/terms/c/costofcapital.asp>

On the contrary, incorporating the tax savings on interest on debt into the project's cash flow and comparing the resulting IRR with the “mixed” PCC is not a standard recognized project evaluation method. To be able to consider this approach perfectly interchangeable with the classic approach presented by Énergir (cash flow without the tax savings and comparison of the IRR with the after-tax PCC), a series of conditions must be met, several of which are generally not seen in practice when evaluating a project.

Strict equivalence between the two approaches requires, at a minimum, a series of conditions, including:

- a constant capital structure throughout the horizon;
- a constant tax rate throughout the horizon;
- equivalent accounting and fiscal depreciation; and
- accounting and tax residual values that are equivalent and zero at the end of the horizon.

2.6 With reference to the citation in reference (i), with respect to the statement that in the “*classic approach to calculating the project cash flow (by excluding the tax savings on interest)*,” please confirm that the revenue flow considered in analyzing profitability is derived from the rates established in rate cases; whereas these rates include a provision for tax payable that factors in the deductibility of the financial costs associated with the cost of debt.

Answer:

Yes, the revenue is established considering the rates in effect, which are, of course, established on the basis of the revenue required for distribution, which revenue requirement must cover all distribution costs, including the tax expense (the after-tax savings on interest on debt), the cost of debt (the before-tax cost, because the savings on the debt is considered in the tax expense), and the cost of preferred and common shares.

Here, it is important, in the Excel file for the profitability calculation (revenue requirement tool) in which the projects are analyzed, to differentiate between the tax expense used to

establish the revenue requirement, which considers the tax savings on debt, and the tax expense considered in the project's cash flow, which excludes the tax savings.

Note that the cash flow is always established as if the project was financed without debt (100% funded from equity). It is insensitive to the project's capital structure, debt cost (assuming the project is partially financed with debt), and even the cost of equity. This is what reference works call "unlevered free cash flow."

Lastly, a project's cash flow is one factor in the profitability analysis that is determined by external conditions. The cash flow is not determined by the costs specific to the project in question. Although, in the regulated environment in which Énergir operates, it is true that rates are established to recover the total revenue requirement, the rate used in a specific project is not fixed to recover the costs of the project under study, and may include interfinancing (in particular to take market competition into consideration).

- 2.7 Please confirm whether the approach that uses the after-tax PCC (for the equity and debt portions) to assess the profitability of capital projects without incorporating the tax savings on interest on the debt into the project's cash flow is consistent with the treatment applied in the rate case for the purpose of establishing the provision for income tax.

Please develop your response by submitting a demonstration.

Answer:

There is no inconsistency between how the revenue requirement is established or calculated (in a rate case or for a specific project, as the approach is identical) and how a project's cash flow is established.

On one hand, for calculating a project's revenue requirement, the capital structure, cost of debt, and cost of equity are known. The revenue requirement is calculated so as to cover all of a project's costs: operating costs, depreciation, tax, cost of debt and cost of equity. The purpose of the exercise is to determine whether the revenues actually generated by a project (at the rates in effect, and therefore an input determined by conditions external to the project) will be enough, year after year, to cover the revenue requirement and, if applicable, establish the "rate contribution" (or rate impact) required to offset the shortfall or surplus between project revenue and the revenue requirement. Here, the tax expense must factor in the tax savings related to interest on the debt. In exchange, the interest expense to be considered in the revenue requirement is "before tax" because the interest expense has reduced the tax.

On the other hand, in calculating the cash flow for a given project, it is not appropriate to consider the capital structure, cost of debt or of equity. Cash flow is independent from these factors. The tax must be calculated accordingly: no debt, so no tax savings on the interest on the debt. The cash flow is therefore essentially made up of an investment (negative flow) followed by a cash flow from operations (which is positive). If the cash flow yields an IRR that is higher than the “after-tax” PCC, we know that this project will generate an operating cash flow that is big enough to cover the interest on the debt (after the related tax savings) and compensate the shareholders.

- 2.8 Please confirm whether the approach that uses the before-tax PCC (for the debt portion) to assess the profitability of capital projects that includes the tax savings on interest on the debt in the project's cash flow is consistent with the treatment applied in the rate case for the purpose of establishing the provision for income tax.

Please develop your response by submitting a demonstration.

Answer:

The problem with the approach that uses the before-tax PCC (for the debt portion) and a cash flow that includes the tax savings on the interest is not one of consistency with how tax is treated in rate cases. Rather, the problems involves equivalency with the classic project evaluation approach. These two approaches do not yield exactly the same results in practice, as explained in the answer to question 2.5. Unless they yield the same results, Énergir wants to consistently apply the approach already approved by the Régie de l'énergie, an approach that is widely used in the industry, among others by Gazifère.

3. **Reference:** Exhibit [B-0293](#), p. 12.

Preamble:

(i) *“Finally, it should be noted that, in accordance with the Régie’s decision D-97-25, Gaz Métro, like the OEB, uses a discount rate in the assessment of project profitability corresponding to the rate of the weighted average prospective capital cost after tax. However, Gaz Métro noted that the calculation of this rate for the 2017 rate case, and for several years, was done by considering the rate of prospective debt before tax rather than after tax, which slightly overestimates the weighted average prospective capital cost. The calculation will be corrected from the 2019 rate file forward.”*

Request:

- 3.1 Please detail and justify the corrections that Énergir plans to make to the PCC used as a discount rate in assessing project profitability. Please illustrate the corrections by providing a numerical example.

Answer:

Énergir privileges the use of the “after-tax” PCC as a threshold for establishing the minimum internal rate of return (IRR) at which a project is deemed sufficiently profitable, which is in line with the practices generally in use in project evaluation and compliant with decision D-97-25.

For consistency’s sake, Énergir privileges the use of the “after-tax” PCC in establishing the profitability index (“PI”) for its projects; a project with an IRR that is exactly equal to the “after-tax” PCC has an IP of 1.

However, Énergir intends to keep using the “mixed” PCC to establish the “rate contribution” (or rate impact) of its projects. The rate impact, which is calculated over various horizons, is the discounted total of all annual variances between a project’s revenue requirement and the actual revenue generated by the project (see decision D-90-60).

The “after-tax” PCC calculation was illustrated in file R-4020-2017, exhibit B-0028, Énergir-2, Document 1, in response to question 4.1.

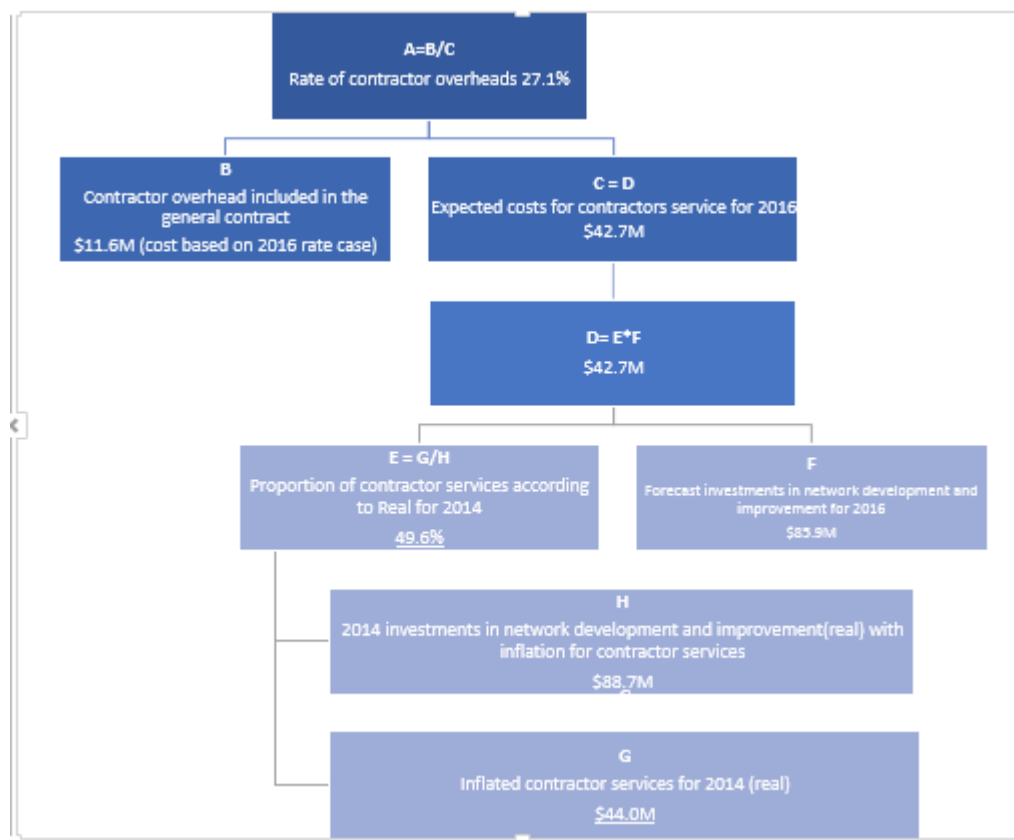
With the 2018-2019 rate case to be filed at the end of April, Énergir will present an exhibit to the Régie that will set out the after-tax PCC, as done by Gazifère (R-4003-2017, B-0259).

Costs - Contractor overheads

4. Reference: Exhibit [B-0378](#), p. 7, R3.1.

Preamble:

Énergir uses the following diagram to illustrate the calculation of the rate of 27.1% for Contractor overheads:



Box “B” refers to the amount of “\$11.6M (cost according to the 2016 rate case).” Moreover, the amount in box “D” indicates \$42.7M.

Requests:

- 4.1 Please specify the reference to the proof in the 2016 rate case for the amount of \$11.6M cited in the preamble.

Answer:

The amount for contractor overheads in the general contract stated in the rate case is not presented separately in the exhibit titled “Additions to the rate base”; rather, it is included under the network development, network improvement and network transmission budget headings. As presented in the request for information cited in the preamble to question 5, Énergir is currently looking at the possibility of aligning the treatment of contractor and corporate overhead in the exhibit on rate base additions, i.e. treating them in a separate heading from capitalized overhead.

- 4.2 Please confirm the Régie's understanding that the amount in “D” should be \$41.7M (\$85.9M X 48.6%) rather than \$42.7M. Please confirm that the contractor overhead rate (amount “A”) should be 27.9% rather than 27.1% on the basis of the numbers presented in the sample diagram in the reference.

Answer:

Énergir noted that the chart shown in the reference, exhibit B-0378, p. 7, R3.1, contained a small error. The amount in “D” should be \$42.7M as presented and the contractor overhead rate remains 27.1%, as presented. Rather, the error occurred with the inflated amount for “G” for contractor services for 2014 (real), which should be \$44.0M rather than \$43.0M, impacting the calculation of the amount at “E”, which should be 49.6% rather than 48.6%. The answer to question 3.1 in Régie information request no. 12 has been revised accordingly.

Rate base additions

5. **References :** (i) File R-3987-2016, exhibit [B-0198](#), p. 1.;
(ii) Exhibit [B-0378](#), p. 13, R5.3.

Preamble:

(i) The table of additions to the rate base presents the capital investments according to the following categories:

- Network development;
- Network improvement;
- Transmission – Network;
- Gas storage;
- General facilities;
- Capitalized overheads;
- Others.

(ii) [...] *It should be noted that Énergir is currently evaluating the possibility of aligning the processing of contractor and corporate overheads as part of the exhibit on additions to the rate base. Indeed, capitalized corporate overheads are in a separate category.* [...] [Our emphasis]

Request:

5.1 Please state whether the category “*Capitalized overhead*” in reference (i) includes capitalized costs other than corporate overhead.

Answer:

No, it only includes corporate overhead.