ADDITIONAL EVIDENCE RELATING TO THE MARGINAL COSTS OF SUPPLY RESULTING FROM DECISION D-2018-080

TABLE OF CONTENTS

1 INTRODUCTION

On July 9, 2018, the Régie rendered decision D-2018-080, in which it asked Énergir to propose a methodology for evaluating the profitability of extension projects which includes the marginal costs of supply, transportation and load balancing.

> "*[120] As a result, the Régie orders the Distributor to include the marginal costs of the STL services in the methodology for evaluating the profitability of system extension projects, following the decision it will render on this matter in Phase 2 of this case.*"[1]

Énergir notes that only the distribution service is currently included in the profitability analysis. The analysis is carried out to evaluate whether the marginal costs resulting from enlisting a new customer are higher than the average costs of all of Énergir's customers. It seeks to determine whether signing a new customer would increase or decrease the rates for all Énergir customers. In other words, the methodology for evaluating profitability evaluates whether the revenue generated by a new customer will enable Énergir to recover the marginal costs associated with that customer, in addition to a portion of the fixed costs related to Énergir's past investments.

Énergir understands that the Régie expects it to establish a list of costs to be included in the profitability analysis. The list would identify all of the supply costs that a marginal customer would incur compared to the revenue generated by that customer on the analysis horizon or, in other words, an analysis equivalent to the one already in place for the distribution service.

This document is Énergir's response to the Régie's request.

2 EXCLUSIVE RIGHTS AND MARKET STRUCTURE

Énergir notes that its exclusive right only pertains to the distribution service and points out that the structure of the current energy distribution monopoly relies heavily on economies of scale regarding the distribution infrastructure.

[1] R-3867-2013, Phase 3, D-2018-080, p. 37.

Supply services are either traded in a free, competitive market or in a market with regulated rates, so Énergir has no influence on the market or price. Accordingly, any economies of scale resulting from investments are not used as a basis for Énergir's supply service offering.

Énergir believes that the relationship between the marginal cost and average cost is very different for the distribution service than it is for the supply services. Énergir states that since supply services are not exclusive to the distributor, it charges rates that are as close as possible to market price, and the rates are therefore equal to the average costs. For this reason, it believes that the criterias for adding customers to the system should only involve the distribution service.

3 SUPPLY

Énergir states that the natural gas commodity is traded in a competitive, liquid market. Énergir regularly trades in this market in order to procure supply and adapt to the demand of its customers. It makes purchases for a set period of up to one year and annually purchases all of the supply it might require to serve its system gas customers. The supply structure is therefore highly flexible, making it possible for Énergir to adapt to changing customers and demand over the year.

Énergir also states that it does not have significant purchasing power in the market and that fluctuations in its demand do not have an impact on the market price or the price it pays for supply purchases. The increase in marginal supply needs resulting from the enlistment of one or more new customers is unlikely to increase the average cost of the supply contracted by Énergir.

This means that including marginal supply costs will not have an impact on any one project's profitability, as marginal costs recorded in the wake of an extension project become equal to average costs as of the very first year of consumption.

4 TRANSPORTATION AND LOAD BALANCING

Énergir contends that the marginal costs of the transportation and load-balancing services are equal to the average costs over the medium and long terms. This section illustrates the behavior of these costs over a shorter period.

With regard to transportation (functionalized to the transportation or load-balancing service), the process for contracting new capacity from TCPL ("New Capacity Open Season" – NCOS) makes it possible to have the said capacity delivered three years after signing the agreement. The TCPL rates apply as of the date the new transportation capacity comes into effect. The rates are the same as the ones Énergir pays for the capacity it has already contracted.

With regard to storage, Énergir renews part of its off-franchise storage capacity on an annual basis, meaning that the adjustment for this service would theoretically last one year. Furthermore, Énergir argues that once the utility has become aware of a future customer's demand, there is normally a delay before it is required to meet it. This adjustment period gives Énergir time to plan for the integration of the new demand and modify its portfolio accordingly, thereby reducing the variance between marginal costs and average supply costs.

Énergir's opinion is that if there is a variance between the marginal cost and the average cost of the transportation and load-balancing services, it would only last 1 to 3 years.

4.1 UNPREDICTABILITY

In response to a request for information from the Régie, Énergir argued that the difference between the average cost and the marginal cost of supply is relatively low and temporary:

> *"[…] although it is possible that some extension projects may incur marginal supply, transportation and load-balancing costs that are different from the average cost of the tool portfolio and that are therefore different from the rates in effect, such cases are very rare and would have a very weak effect for a very short (temporary) duration."*[2]

The Régie does not believe that this argument sufficiently justifies the costs of these supply services being absent from the methodology for evaluating the profitability of extension projects:

> *"[116] Therefore, the Régie does not retain the argument that Énergir put forward stating that because the variance between the marginal STL costs and revenue is non-existent or very low, there is no reason to consider it."*[3]

[2] R-3867-2013, Phase 3, Gaz Métro-9, Document 17, p. 77.
[3] R-3897, D-2018-080, p. 36.

It added:

> *"The Régie believes that, over time, the relationship between the marginal costs and average costs of the STL services may evolve in many ways that could be difficult to predict."*[4]

Énergir believes that the unpredictable nature of these costs, acknowledged by the Régie, prevents Énergir from including them in a profitability analysis. In fact, numerous gas supply tools could be used by Énergir to optimize its supply plan, so the cost of a marginal supply plan greatly depends on the context prevailing at the time of its creation, which would make the results of the profitability analysis much less stable than those of the profitability study carried out for distribution.

Énergir would like to specify that it is sometimes able to meet the supply needs of new customers without purchasing new tools on the market. For example, Énergir could potentially use the supply tools it already has, in which case the marginal costs would be equal to the average cost. In the event that Énergir had to purchase new tools on the secondary market to meet the demand of a new customer, the marginal cost could be lower or higher than the average cost, as it would be subject to market fluctuations. The marginal cost of supplying a customer may therefore vary, depending on the context at the time of the customer's request for connection, and including these costs could potentially yield highly unpredictable results.

The methodology for evaluating profitability is used by Énergir to assess the profitability of new potential customers. There are several thousand new potential customers every year. For this reason, the tool needs to be simple to use (and cannot be used on a case-by-case basis) and must be a relatively stable way to evaluate costs over time in order to allow for efficient and consistent decision-making on an ongoing basis.

Énergir believes that the marginal costs of the transportation and load-balancing services for the first years are unpredictable and that including these costs could potentially lead to inequity among the multiple customers subject to the profitability evaluation. The unpredictable nature of these costs could also create a bias when Énergir decides whether or not to accept a new customer because the marginal cost evaluation could significantly differ between the date the marginal costs are calculated and the date the customer is connected to the system.

[4] R-3897, D-2018-080, p. 36.

5 IMPACT OF ADDING CUSTOMERS TO THE SUPPLY PLAN

The points made in this evidence demonstrate that including the marginal costs of supply in the evaluation of a project's profitability is not necessary over the profitability analysis horizon, because:

- marginal costs are usually equal to average costs over the analysis period, which is typically 40 years; and
- for STL services, rates correspond to average costs for all customers or categories of customers.

That being said, Énergir still attempted to evaluate the impact that adding a customer or project to a supply plan would have over a period of 1 to 3 years.

5.1 METHODOLOGY

In order to simulate the impact of adding a new customer or project to a supply plan, Énergir added the demand related to the project to the demand forecast in the supply plan and carried out a new cost evaluation by adjusting the tools required to meet the new demand. Theoretically, this makes it possible to determine the marginal impact of the project on costs. The project's marginal cost would then equal the difference between the cost of the supply plan including the project's estimated demand and the cost of the supply plan without the marginal demand.

According to Énergir, this approach is the optimal and most precise way to estimate the marginal impact of adding a project to overall supply costs. However, it is important to specify that this method involves a substantial amount of work and it would not be possible for Énergir to apply it to the thousands of customers and projects added annually.

5.2 RESULTS

Énergir tested this methodology by creating several versions of the supply plan filed under the 2020-21 Rate Case by adding customers with different consumption volumes and profiles (stable and interruptible) over the period during which some variance could arise between the average cost and marginal cost, i.e. for a period of 3 years following the addition of a new project or customer.

After analyzing the different versions of the supply plan, Énergir found that the total average supply cost decreased in every version where customers were added, according to the tools available on the market at the time the evaluation was carried out. That means that the short-term marginal cost of adding projects or customers is lower than the average cost. However, it is important to specify that because the results of the marginal cost evaluation are influenced by several factors, notably the time when the marginal costs are calculated, the results of the analysis could have shown the opposite effect, i.e. the short-term marginal cost of adding projects or customers could have been higher than the average cost.

Énergir considers important to stress that even though it would be possible to evaluate the marginal cost from a theoretical point of view, the results of the analysis are extremely volatile and difficult to predict, as acknowledged by the Régie.[5] In fact, the results are especially dependent on market price variations and the time during which the consumption of existing customers was forecast. According to Énergir, the principle of temporal stability must be complied with to ensure that customers are treated fairly when evaluating investment projects. However, the characteristics of supply costs and the market in which they fluctuate preclude Énergir from complying with this principle, making it extremely difficult or even impossible to select a fair, equitable methodology.

6 CONCLUSION

In light of the foregoing, Énergir believes that evaluating the impact of a new project on supply costs using the average cost, which reflects the marginal cost, is the best way to estimate the costs of the said project.

If the Régie sees fit, Énergir could add the marginal supply costs, which are equal to the supply revenue, to the profitability analysis, even though there would be no impact on the profitability analysis.

However, Énergir argues that it is not necessary to include the marginal costs of the supply, transportation and load-balancing services in the methodology for evaluating the profitability of

[5] R-3897, D-2018-080, p. 36.

extension projects, as these costs would have no impact on profitability and would make the analysis unnecessarily complicated.

Énergir asks the Régie to take note of the requested follow-ups to its decision D-2018-080 to be filed under Phase 2 of this case and to declare them satisfactory.