

## SUMMARY

The Régie de l'énergie (the "Régie"), in order to assemble all the information required to draft this Advice concerning the natural gas supply and transmission capacity needed to meet natural gas demand from Québec consumers over the medium and long term (the "Advice"), held a public consultation. It received observations and written recommendations from twelve interested persons. Seven were convened to attend its hearing on October 6, 7 and 8, 2014, along with three experts.

### *Natural gas demand*

The Régie believes that, between now and 2030, natural gas demand in Québec will increase at an annual rate of around 2%, after taking into account energy efficiency savings. Demand from the industrial sector accounts for over half of this total, and is expected to increase at an annual average rate of about 2.5%. The commissioning of the IFFCO Canada Enterprise Ltd. plant alone will be responsible for over 44% of the growth in the industrial sector.

The Régie estimates that, by 2030, peak natural gas demand will reach around 41.0 Mm<sup>3</sup>/day, an increase of 4.7 Mm<sup>3</sup>/day compared to 2015. Over this 15-year period, the increase will require an annual growth rate of 1.2% in transmission capacity. The Régie considers that this rate of growth is moderate and that meeting demand is not an issue.

### *Context for natural gas supplies*

The natural gas market is undergoing profound change, mainly because of sustained growth in shale gas production. A large part of the growth results from the development of the Marcellus and Utica shale deposits in Pennsylvania and Ohio. Natural gas distributors in eastern Canada and the northeastern United States previously sourced their supplies from producers in Western Canada, but now tend to purchase gas at the Dawn hub in southern Ontario. Dozens of pipelines converge on the hub, bringing a growing portion of the gas from the shale deposits nearby.

This switch in supply sources is directly reflected in the volume of natural gas transported on the TransCanada Pipelines Limited (TCPL) mainline. Since most pipeline costs are fixed, this decline in volume creates upward pressure on transmission costs for users, including Québec consumers.

### *Supply options*

#### First option: supplies from inside Québec

Three potential sources of natural gas from inside Québec were considered:

- shale gas from Québec;
- natural gas from Anticosti island and the Gaspé peninsula;
- renewable natural gas from Québec.

The Régie considers that shale gas from Québec and natural gas from Anticosti island and the Gaspé peninsula cannot be considered reliable supply options between now and 2030, in particular because of issues relating to economic profitability, the environment and social acceptability. The Régie is, however, aware that two strategic environmental assessments (SEAs) are currently under way, one to review the fossil fuel sector as a whole and one specific to Anticosti island.

In addition, if all the renewable natural gas projects announced to date were completed, the total production from these sources would represent only 1.4% of demand in Québec by 2030. As a result, this option cannot provide a reliable supply for Québec.

The Régie considers that only a natural gas supply from outside Québec, whether from Western Canada or the Dawn hub, transported via the TCPL mainline, constitutes a reliable source to meet the natural gas demand in Québec.

#### Second option: supplies from outside Québec

The major increase in shale gas production in the northeastern United States amply compensates the decrease in natural gas production in Western Canada.

The abundance of the resource should continue to place downward pressure on prices at natural gas hubs.

Given the abundance of gas that can be extracted at low cost, the Régie considers that the question of natural gas supplies concerns mainly the availability of transmission infrastructures to move natural gas from production to end-use sites.

#### *Transmission options*

In this Advice, the Régie looks specifically at the impact of the Energy East project on natural gas supply and transmission in Québec. However, it does not deal with the other aspects of the project, such as the pipeline route through Québec or its environmental impact.

#### First option: TCPL mainline without Energy East

Maintaining the current situation, without converting part of the TCPL mainline to carry oil, would ensure a reliable supply for natural gas consumers in Québec.

However, the moderate growth in demand forecast for Québec and the probability that US shippers will not renew some of their firm transmission contracts on the TCPL mainline will lead, over time, to a decrease in the volume of gas transported in the Eastern Triangle, the part of the mainline connecting Québec to the supply hubs. This trend will create upward pressure on transmission rates, and the Régie considers that this option does not lead to a desirable outcome.

### Second option: TCPL mainline with Energy East

The Régie considers that the conversion of some segments of the mainline in the Prairies and northern Ontario to carry oil, as part of the Energy East project, is a desirable outcome. It helps solve the problem of pipeline under-use, and will lead to real benefits for shippers and TCPL.

Distributors and industrial customers in Québec are concerned by the impacts of the Energy East project, including the associated Eastern Mainline project, if implemented as proposed by TCPL. Their concerns focus on the transmission capacity that will remain available in the Eastern Triangle, and also on the portion of the project costs that TCPL intends to charge to them, even though the project is mainly intended to meet the needs of the petroleum industry.

The Régie considers that it is of fundamental importance to establish, on a firm basis, the transmission capacity to be conserved in the Eastern Triangle. Once this is done, it considers that TCPL will be able to meet the growth in the peak transmission capacity needs forecast between 2015 and 2030 (0.2 PJ/day) to supply Québec. However, the Régie is concerned by the costs associated with the project that will be borne by Québec consumers.

### *Conclusion*

Between now and 2030, the demand for natural gas in Québec will increase by roughly 2% per year. The only reliable supply option is to purchase natural gas outside the province and transport it to Québec via the TCPL mainline.

Given the context, the Energy East project offers a desirable outcome to the extent that it would convert currently under-used natural gas transmission assets to another use. The Régie considers that conversion could help limit the increase in natural gas transportation costs.

However, the Régie considers that if shippers state that they lack capacity and are ready to make firm commitments to obtain more, it would be more prudent for TCPL to ensure, via a new call for bids open to all shippers, that the capacity required is accurately established.

At the time of going to press, the Régie notes that TCPL has issued a new call for bids open to all shippers for transmission capacity with a targeted in-service date of November 1, 2017 (NCOS 2017).

The Energy East project is designed above all to serve oil shippers, and the Régie considers that they should bear the costs associated with the oil component of the project. The gas component of the project introduces costs and risks that are not currently borne by natural gas shippers. The Régie believes that they should not have to bear them alone. As a result, TCPL should review the project to ensure that gas shippers will not cross-finance the oil segment of the project and will not have to bear a greater risk than at present.