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Pacific Economics Group Research, LLC

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Guy Sarault
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Hi Guy,

Attached please find the proposal you requested for consultation and testimony in the last phase of the proceeding on an MRI for transmission services of Hydro-Québec.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark N. Lowry', written in a cursive style.

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Proposal for Additional Consultation and Evidence on the MRI of Hydro-Québec Transmission

Mark Newton Lowry, PhD

15 August 2018

On 27 July 2018 Hydro-Québec Transmission (“HQT” or “the Company”) filed a *demande tarifaire* with evidence on unresolved issues in the design of its *mécanisme de réglementation incitative* (“MRI”). Shortly thereafter, the Régie de l’Énergie in D-2018-100 issued a procedural decision inviting requests for intervention and budgets for participation in the proceeding. A hearing on MRI issues is scheduled for mid-January 2019.

This document constitutes a proposal by Pacific Economics Group Research LLC (“PEG”) to provide AQCIE, CIFQ, and other Québec consumer groups with consultation on a strategy for responding to the MRI evidence that HQT has filed since Phase 1 and appropriate expert testimony. I begin with a discussion of the background to the proceeding and then consider HQT’s proposal and provide an offer of services.

Background

In D-2018-001 the Régie issued its final decision in Phase 1 of a proceeding to develop an MRI for HQT. This decision determined the broad outlines of the mechanism, which included indexation of the revenue requirement for *charges nettes d’exploitation* (“CNE”). The *formule d’indexation* for CNE revenue will include an inflation measure (“I”), X factor, and a growth factor (“C”) driven by additions to HQT’s plant in service. The Régie proposed (but made no final decision regarding) use the same inflation measure it approved for the MRI of HQD and a materiality threshold for Y factors of 2.5 M\$.

A cost of service approach will be used for the Company’s capital revenue in this MRI. However, the Régie asked HQT to propose a non-binding *formule paramétrique* for capital expenditures (“capex”) as a point of comparison to the Company’s capex proposals during the plan. This formula is expected to include a growth factor, but the Régie otherwise provided no guidelines concerning its development. [The Régie expressed interest in the eventual inclusion of capital in the *formule d’indexation* for a transmission MRI.](#)

A provisional X factor, applicable for at least two years of the MRI, will be determined by a process of “*jugement*” rather than a custom productivity study using recent transmission industry data. However, HQT was ordered to undertake a multifactor productivity study of power transmitters during



the MRI term. The Company was asked to present “*la méthodologie et l’échéancier*” for the study in its Phase III evidence.¹

HQT’s service quality performance will be monitored using metrics like those already reported in HQT’s *dossiers tarifaires*. These metrics should notably address the following four transmission service quality dimensions:

- reliability of service
- availability of the network
- customer satisfaction
- public and employee safety.

The Company’s performance will be gauged by comparing its own values for these metrics during the plan to target values.

A *mécanisme de traitement des écarts de rendement* (“*MTÉR*”) will be linked to the service quality performance results. Apart from the performance adjustment, the *MTÉR* will resemble that approved in D-2014-034. In this *MTÉR*, earnings shortfalls are not shared but there is a banded sharing mechanism for surplus earnings. The Régie also approved a *clause de sortie* “*permettant une révision ou un interruption du MRI*” but postponed consideration of its details to Phase 3.

HQT Evidence and Proposal

Revenue Cap Index

HQT embraced the proposals of the Régie concerning the inflation measure and the materiality threshold for the Y factor. The Company retained Concentric Energy Advisors (“Concentric”) to provide evidence on productivity trends of power transmitters. Concentric had successfully advocated a process of *jugement* for setting the X factor for HQT, but reported no study on the productivity trends of North American power transmitters. Its report focused instead on productivity and cost trend information from Europe, Australia, and New Zealand and on a simple “Kahn method” exercise based on HQT data. Concentric recommends and HQT proposes a -0.60% X factor that is the sum of a -0.60% productivity growth target and a 0% stretch factor.

Parametric Capital Cost Escalator

Concentric also provided some evidence on possible *formules paramétriques* for capital cost. Canadian power distributor MRI precedents were emphasized in this discussion. Concentric recommends formulas similar to those in the current MRI of FortisBC but did not develop specific formulas.

¹ D-2018-001 p. 32.



PMF Study

HQT presented a schedule for the PMF study but did not present the contemplated methodology. A methodology will not be presented until a consultant is retained to do the study.

Service Quality Performance and MTÉR

HQT proposes six performance indicators which address the Régie's four areas of concern. Results for each of the four areas would receive equal weight. The proposed targets are the averages of the Company's values for these indicators over the five-year 2013-2017 period.

A summary *indice global du maintien de la qualité du service* ("IMQ") would involve calculations in two stages. Following a statistical normalization of the results for individual metrics, performance would be averaged. Results of the metrics would have varied weights.

Unfavorable IMQ scores could not affect earnings unless they fell below negative one. This is the value of the IMQ at which decline in quality using each metric and target equals the standard deviation of HQT's corresponding metric data. Progressively worse values would require HQT to forfeit a progressively higher share of any surplus earnings.

Clause de Sortie

HQT embraces a proposal by Concentric that the *clause de sortie* be triggered if the Company's rate of return varies by more than 150 basis points from its target in either direction. In that event, the MRI would be suspended and HQT would return to cost of service regulation.

Preliminary Critique

We provide here some commentary on areas of concern with HQT's evidence based on a preliminary perusal thereof.

X Factor

The Régie is disserved by the lack of studies on the CNE productivity trends of North American power transmitters. This is all the more unfortunate because a study of the CNE productivity of transmitters is relatively simple to undertake. One problem with Concentric's alternative X factor evidence is inadequate attention to transmission productivity targets chosen by regulators. This was also a problem with Concentric's evidence in the HQD MRI proceeding. Concentric's review does not provide a satisfactory basis for the -0.60% X factor recommendation.

PMF Study

HQT disregarded the Régie's order to present its methodology for the productivity study in its 2019 *Demande*. Reasonable guidelines should be established for this study in advance so that it is not unduly self-serving. For example, the study should consider alternative methodologies, peer groups, and sample periods and thoroughly discuss their pros and cons. Partial factor productivity trends in the



use of CNE and capital inputs should be considered as well as the multifactor productivity trend. Productivity trends of HQT should be measured as well as the productivity trends of other utilities.

Formule Parametrique for Capital Cost

The development of a *formule parametrique* for capex would be a useful step towards the eventual inclusion of capital cost in the transmitter costs addressed by a revenue cap index. Unfortunately, HQT did not comply with the Régie's request to develop such a formula. The unsatisfactory information Concentric gathered on transmitter productivity trends makes it harder to develop a good formula. A specific *formule parametrique* could be developed by PEG but would involve considerable effort.

Y Factor

The 2.5 M\$ materiality threshold proposed for the HQT Y factors is too low.

Service Quality Provisions

Here are some areas of concern with HQT's proposed service quality performance incentive system.

- A thoughtful review transmission service quality metrics is appropriate which considers metrics already used by the Régie, the Federal Energy Regulatory Commission, and other jurisdictions.
- The proposed statistical method for normalizing performance results in the IMQ is unusual.
- HQT provides no evidence that the financial penalties it proposes for poor service quality are appropriate. It would be quite a coincidence if the appropriate penalty for a 200 basis point decline in the IMQ was to reduce surplus earnings by 100 basis points. The worst penalty that HQT could incur for poor quality would be the full forfeiture of surplus earnings.
- Another concern about the service quality performance incentive mechanism is its linkage to an MTÉR that does not share earnings shortfalls. While there are some good arguments for not sharing these shortfalls, and this issue has been resolved for this MRI, linking service quality to this kind of MTÉR would weaken the Company's incentive to maintain quality in periods of underearning, which can easily occur. The Company would not underearn even if its measured service quality substantially worsened. Many service quality incentive mechanisms do not link performance results to the MTÉR.
- The substantial dead band in the linkage mechanism is also controversial.

Clause de Sortie

The proposed *clause de sortie* is too conservative. HQT might even be tempted to suffer one year of low earnings to evade the MRI. Earnings variances should be substantial for at least two years before the plan is reconsidered. Many MRIs do not have a *clause de sortie*. The relatively short four year term of the plan, the MTÉR, and the cost of service treatment for capital cost reduce the need for



such a clause. Given the differences between the plans for HQT and HQD, there is no need for the *clauses de sortie* to be the same.

Proposed Plan of Work

Consumer groups should energetically push back on some aspects of HQT’s new MRI proposal. The Régie has once again been presented with an unbalanced review of pertinent MRI options and precedents. PEG can provide testimony on these issues cost-effectively. However, since there have been few proceedings on power transmission MRIs in North America, we cannot rely on past experience to the extent that we did in the MRI proceeding for HQD.

The attached budget, which is denominated in Canadian dollars, itemizes by task the services that PEG offers to provide in this proceeding. The proposed hourly rates are well below those that PEG charges to most of its U.S. clients and far below those of prominent Boston-area consultants like Concentric. The weak Canadian dollar materially depresses our expected returns from this work since our costs are incurred in U.S. dollars.

We provide a set of “necessary” tasks and also include a budget for an optional task. The necessary tasks include the following.

- Review the HQT evidence
- Prepare information requests and review responses
- Conduct an independent review of available evidence on transmitter productivity trends and possible capital revenue escalators
- Conduct an independent review pertinent precedents for *clauses de sortie* and transmitter service quality incentives, considering such issues as their relative weights, collective impact, and the linkage to MTÉRs
- Consider alternative proposals for other MRI design issues such as the inflation measure and the materiality threshold for the Y factor
- Prepare preliminary commentary on the HQT filing and questions for AQCIE, CIFQ, and other Québec consumer groups and review their responses
- Expand this commentary into written testimony that addresses the X factor, Y factor, *formule paramétrique*, service quality provisions, *clause de sortie* and other MRI design issues and makes alternative recommendations where warranted
- Review evidence of other intervenors
- Respond to information requests of the Régie and HQT and other parties
- Prepare for oral testimony (including presentation), travel to Montreal, and attend the MRI *audience*.

The proposed cost of the necessary tasks is modestly above the cost that the Régie approved for PEG’s services in Phase 3 of the HQD MRI proceeding. This is reasonable when account is taken of the following considerations.



- The Phase 3 hearing did not encompass performance metrics or the *clause de sortie*. This matters because HQT's proposals in these areas are controversial and the issue of service quality is particularly complicated and important. So the proper comparison is to PEG's cost for HQD's Phase 3 hearing plus the new HQD MRI hearing.
- The HQT Phase 3 hearing involves the additional issue of a *formule parametrique* for capital expenditures. HQT did not provide the requested formulas.
- Everything involves more work for transmission because there are fewer precedents and all consultants have less experience. We are, for example, compelled to consider precedents in complicated overseas regulatory systems like those of Australia, Britain, and New Zealand.
- The miscellaneous other issues that were resolved in the HQD proceeding didn't involve much work, so there aren't many cost savings possible.

An optional task is to undertake some empirical research, using readily available U.S. transmission cost data, to develop *formules parametriques* for capex. PEG has developed similar formulas for power distribution capex for various clients that include the Ontario Energy Board and Alberta's Utilities Consumer Advocate. The cost that we are offering for this task is very reasonable. Absent this work, the Régie may end the proceeding with no *formules parametriques*.

