

**Réponses du Transporteur  
à la demande de renseignements numéro 1  
de l'Association québécoise des consommateurs  
industriels d'électricité et du  
Conseil de l'industrie forestière du Québec  
et Pacific Economics Group  
(« AQCIE-CIFQ » et « PEG »)**



**DEMANDE DE RENSEIGNEMENTS N<sup>0</sup> 1 DE LA AQCIE-CIFQ (PEG) À  
HYDRO-QUÉBEC DANS SES ACTIVITÉS DE TRANSPORT D'ÉLECTRICITÉ  
(LE TRANSPORTEUR)**  
**RELATIVE À LA DEMANDE DE MODIFICATION DES TARIFS ET  
CONDITIONS DES SERVICES DE TRANSPORT POUR L'ANNÉE 2019**

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***FACTEUR X***

**1. Référence : HQT-4, Document 2.1**

**Préambule :**

In earlier testimony, Concentric Energy Advisors (“CEA”), as consultant to Hydro-Québec Transmission (“HQT” or “the Company”), recommended that the X factor for the Company be determined by a process of “judgement.” In its July report for HQT, however, CEA noted that

“There are multiple methodologies to help inform X for *distribution* utilities, ranging from observing past productivity gains to industry benchmarking studies to complex productivity studies. The challenge in this case is to identify and determine the appropriate analyses and methodologies to be used for informing X for *transmission* utilities.” [italics added]

Concentric highlighted several reasons for the lack of comparable productivity data on transmission companies in relation to distribution utilities. Among these factors are:

- Traditional approaches to performance-based regulation adopted for distributors have been more selectively adopted for the regulation of transmission companies;
- Transmission, as a share of the customer’s final bill, is typically the smallest cost component, in contrast to generation and distribution;
- The capital intensive and project specific nature of transmission creates a less homogeneous operating and cost profile; and
- Challenges in terms of creating appropriate peer groups for cost benchmarking and industry productivity analysis.

**Demande:**

- 1.1 With the benefit of hindsight, and considering CEA's extensive reliance on productivity studies by others to substantiate its X factor judgement for HQD, does CEA believe that its recommendation to the Régie not to undertake a transmission productivity study prior to the start of the MRI for HQT was sound?

**Réponse :**

1       **Yes. Furthermore, HQT has not yet formulated its view on the appropriate**  
2       **methodology for this study. Among the factors to be considered will be:**  
3       **the outcome of this Phase III decision, the costs to be included under the MRI,**  
4       **the availability of appropriate peer group data, the guidance of its expert on the**  
5       **appropriate methodology, and the costs and time required for completion of**  
6       **the study.**

**2. Référence: HQT-4 Document 2.1**

**Préambule :**

CEA discusses productivity trend research in the E3Grid study on pages 8-10 of its report.

**Demande:**

- 2.1 Please confirm that this study considers the trend in total expenditure (totex) productivity and not the total cost productivity that is conventionally considered in Canadian MRI proceedings. The totex trend is not slowed by the depreciation of older plant.

**Réponse :**

7       **The E3Grid study of European transmission companies defined Totex with the**  
8       **following logic:**

9           **Definition of benchmarked costs – The benchmarking is based on total**  
10          **expenditures (Totex), which is the sum of operating expenditures (OpeX)**  
11          **and capital expenditures (CapEx), measured as capital consumption**  
12          **(depreciation and return).**

13          **On CapEx, the following methodology was employed, using data collected for**  
14          **1965-2011:**

15           **CapEx consists of depreciation and a return on capital. The actual**  
16          **investment streams are annualized using a standard annuity factor  $\alpha(r,T)$ , where:**

- 1           • r stands for a real interest rate; and  
2           • T stands for the average life-time of the investments in the  
3           respective year.

4           The annual investments from the investment stream data are multiplied  
5           with the annual standard annuity factor  $\alpha(r,T)$ .

6           In using this methodology, the authors are measuring both operating and  
7           capital inputs. As for differences between this study and in Canadian MRI  
8           proceedings, there is no widespread agreement among experts, or regulators,  
9           on the “conventional” method for measuring capital inputs allowing us to  
10          draw this conclusion, and we have not compared the results for depreciation  
11          of older plant.

### **3. Référence: HQT-4, Document 2.1**

#### **Préambule:**

CEA states on p. 7 that

Taken more broadly, the Kahn method can be considered as a measure of productivity as revealed by the industry's past experience and actual accounting costs. As illustrated in the next section, the Australian Energy Regulator calculates productivity in this manner as an input to appropriate X factors for its regulated transmission companies.

#### **Demande:**

3.1      Does CEA intend to say that the AER has used the Kahn method in its productivity calculations? If so, please substantiate this claim.

#### **Réponse :**

12           There are multiple steps to the AER regulatory process. Benchmarking and  
13           productivity studies are used to measure the performance of all transmission  
14           companies, as described in Concentric's report. These results are one  
15           determinant of the approved revenue path for each company. The AER's X  
16           factors are then used to smooth annual revenues over the course of a  
17           transmission provider's plan. This is distinct from a historical Kahn analysis,  
18           as is provided for HQT, but similar in that the AER approach calculates the  
19           implied change in annual revenues against inflation and uses that metric to  
20           smooth revenues over time.

**4. Références : CEA report of 4 April 2018  
HQT-4, Document 2.1**

**Préambule :**

CEA discusses on pp. 22-27 of its April 2018 report and on pp. 13-17 of its July report studies for the Australian Energy Regulator of the productivity trends of jurisdictional power transmitters.

**Demande:**

- 4.1 Please confirm that the AER's consultant uses a "physical asset" approach to measuring the capital quantity that ignores the tendency of depreciation to slow cost growth.

**Réponse :**

1 The AER's consultant describes its methodology as follows:<sup>1</sup>

Capital stock (assets). The physical assets TNSPs use to provide services and invest in to replace, upgrade or expand their network. We split capital into overhead lines, underground cables and transformers.

- For our MTFP analysis we use physical measures of capital inputs. Using physical values for capital inputs has the advantage of best reflecting the physical depreciation profile of TNSP assets.<sup>38</sup>
- For the PPIs we use the real value of the regulatory asset base as the proxy for assets as the starting point in deriving the real cost of using those assets. Asset cost is the sum of annual depreciation and return on investment.<sup>39</sup> This measure has the advantage of reflecting the total cost of assets for which customers are billed on an annual basis, using the average return on capital over the period. This accounts for variations in the return on capital across TNSPs and over time.

2 We would not conclude from this description that the study ignores the  
3 tendency of depreciation to slow cost growth.

<sup>1</sup> Annual benchmarking report, Electricity transmission network service providers, 2017, P. 44.

- 4.2 Please confirm that the AER's multifactor productivity results are not used to set X factors.

**Réponse :**

- 1           **Not confirmed. The AER's multifactor productivity results are a key**  
2           **determinant used to set each company's revenue path and resulting X factor.**  
3           **As described by the AER:<sup>2</sup>**

The AER uses benchmarking in various ways when assessing and amending network expenditure proposals. We use it to measure the efficiency of network opex, capex and total expenditures and changes in the efficiency of these expenditures over time. This gives us an additional source of information on the efficiency of historical network opex and capex expenditures and the appropriateness of using them in forecasts. We also use benchmarking to understand the drivers of trends in network efficiency over time and changes in these trends. As we have done in this year's report, this can help us understand why network productivity is increasing or decreasing and where best to target our expenditure reviews.<sup>29</sup>

- 4           **As described in CEA's evidence and above in response to AQCIE question 3.1,**  
5           **revenue requirements are set and an implied X factor is calculated and used to**  
6           **smooth annual fluctuations in revenues over the term of the plan.**

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<sup>2</sup> Annual benchmarking report, Electricity transmission network service providers, 2017, P. 19.

4.3 What output index was used in the latest AER study and how was it derived?

Réponse :

1 According to the AER's report:<sup>3</sup>

Outputs are measures that represent the services the TNSPs provide. The outputs we use to measure service provision are:

- Energy throughput (GWh)
- Ratcheted maximum demand (RMD)
- Circuit length (Circuit kms)
- End-user numbers (End User nos) (updated - previously the voltage-weighted connection numbers output was used)
- (minus) Minutes off-supply/Energy not supplied (ENS) (updated - previously no cap was placed on the weight applied to reliability, this year a weight based on current AEMO VCRs capped at a maximum absolute value of 5.5 per cent of gross revenue has been applied).

Previous TSP benchmarking used output cost shares to weight outputs apart from reliability (ENS). Output cost shares for outputs other than reliability were also updated this year.

2 The derivations of each output measure are described in Appendix B of  
3 this report.

4.4 Why does Table 7 in the April report not include results for MurrayLink and  
5 DirectLink?

Réponse :

4 MurrayLink and DirectLink are not included in the AER's 2017 Annual  
5 benchmarking report for Electricity transmission network service providers.

## 5. Référence : CEA report of 4 April 2018

Préambule :

CEA discusses on pp. 32-35 of its April 2018 the use of "formula-based rates" by the FERC to regulate the revenue of jurisdictional transmission owners. CEA notes on p. 32 that "this enables transmission owners to recover costs in as close to real time as possible."

<sup>3</sup> Annual benchmarking report, Electricity transmission network service providers, 2017, P. 16.

**Demande:**

5.1 Please that formula rates produce weaker incentives to contain O&M expenses than the MRI which the Regie has chosen for HQT.

**Réponse :**

1           **Partially confirmed.**

2           **In general, a multi-year rate plan contains stronger incentives than an annual**  
3           **adjustment plan (such as the FEC's formula rate), but the FERC formula rate**  
4           **has no earning's sharing mechanism to reduce its incentive properties and**  
5           **there is opportunity in any given year for companies to exceed or miss their**  
6           **allowed ROE.**

- 6. Références :**
- (i) Pièce B-0013, p. 6;
  - (ii) Piece B-0013, p. 7;
  - (iii) Piece B-0013, Tableau 6, p.18

**Préambule :**

- (i) « In addition to the international research, Concentric worked with HQT to examine its past record of productivity, as measured by the cost categories covered by the formula adopted by the Régie in its Phase I Decision for HQT. This analysis produced a “Kahn method” X factor. This method refers to the work of economist and regulatory expert Alfred E. Kahn. ...Dr. Kahn developed a methodology...for computing industry -wide weighted average costs for purposes of calculating the industry cost trend ».
- (ii) « Taken more broadly, the Kahn method can be considered as a measure of productivity as revealed by the industry’s past experience and actual accounting costs ».

**Demandes:**

6.1 Please provide Concentric’s understanding of Kahn method mathematics.

**Réponse :**

1       **Concentric is employing the basic principles of the “ Kahn method ” that rely  
2       on the company’s actual costs to determine a trend for purposes of setting the  
3       X factor. Dr. Kahn’s work is cited in Concentric’s report, and is repeated here.<sup>4</sup>**

6.2      What is “authorized growth” in Table 6 and why is it relevant?

**Réponse :**

4       **Au paragraphe 314 de la décision D-2018-001, la Régie retient le Facteur C  
5       proposé par le Transporteur pour tenir compte des charges additionnelles  
6       résultant de la croissance du réseau de transport dans la formule d’indexation.  
7       Ainsi, les montants inscrits à la rubrique " authorized growth " correspondent  
8       au Facteur C autorisé pour chacune des années.**

9       **Voir également la section 4 de la pièce HQT-4, Document 2.**

6.3      Please explain how the methodology for calculating Facteur X detailed in Table 6  
tracks historical changes in the actual costs of the Transmitter.

**Réponse :**

10       **For Opex, the result of the X factor calculated in Table 6 is how historical costs  
11       have tracked against inflation from year to year.**

12       **Voir également la réponse à la question 10.1 de la demande de renseignements  
13       numéro 1 de la Régie à la pièce HQT-13, Document 1.1.**

6.4      Please explain how Facteur X calculated in (iii) is solely a measure of productivity.

**Réponse :**

14       **Concentric has not stated that the X factor is a sole measure of productivity.  
15       It establishes a trend of actual costs in relation to inflation, which is used to  
16       set a benchmark for costs in HQT’s first generation MRI for Opex.**

6.5      Please provide the Excel version of Table 6 with all formulas intact.

**Réponse :**

17       **Voir la réponse à la question 10.1 de la demande de renseignements numéro 1  
18       de la Régie à la pièce HQT-13, Document 1.1.**

<sup>4</sup> See: Docket No. RM93-11-001, Order No. 561-A, Revisions to Oil Pipeline Regulations Pursuant to Energy Policy Act of 1992, July 28, 1994.

## ***Formule Paramétrique***

### **7. Références : HQT-4, Document 2**

#### **Préambule :**

HQT claims to use the Kahn method to calculate the X factor in a *formule paramétrique* for its capital cost. The 2013-2017 sample period for this calculation is unusually short for a Kahn method calculation.

#### **Demandes:**

7.1 What are "prestations de travail aux investissements?"

#### **Réponse :**

1      Les prestations de travail aux investissements représentent la portion déduite  
2      des charges du Transporteur imputée aux projets d'investissement au moyen  
3      de taux horaires standards et d'heures de travail. Les taux reflètent les coûts  
4      directement contributifs à chaque heure de présence à pied d'œuvre d'un  
5      employé qui exécute un travail associé à son expertise.

6      **Voir également la section 6.3 de la pièce HQT-4, Document 2.**

7.2 Please confirm that X is calculated on the basis of actual costs and not revenue requirement. If not, please calculate using actual costs.

#### **Réponse :**

7      **Le Transporteur le confirme.**

7.3 Please provide the Excel version of Table C-1 with all formulas intact.

#### **Réponse :**

8      **Le tableau C-1 de la pièce HQT-4, Document 2, en format Excel, est déposé  
9      dans le Système de dépôt électronique (SDÉ) de la Régie.**

## MTER

### 8. Références : HQT-4 Document 2

#### Préambule :

HQT has proposed to link results of an *indice global du maintien de la qualité du service* ("IMQ") which it has constructed to its proposed *mécanisme de traitement des écarts de rendement* ("MTER"). The IMQ would summarize variance from benchmarks in metrics for several dimensions of the Company's service quality during the plan. Each benchmark is the average value of the metric which the Company has achieved in five recent years. The IMQ assigns equal weight to performance in four quality areas.

- *Fiabilité du Service*
- *Disponibilité du Réseau*
- *Sécurité*
- *Satisfaction de la Clientèle*

The IMQ is designed so that its value falls to -1.0 if performance using each metric declines by the amount of its standard deviation.

The Company proposes that it keep its share of surplus earnings so long as the value of the IMQ equals or exceeds -1.0. The Company's share of surplus earnings would decline with progressively more negative IMQ values and fall to zero at a value of -2.0. There is no further financial consequence for the Company if the value of the IMQ is less than -2.0.

#### Demandes:

- 8.1 Please confirm that, under the Company's proposal, the penalty for a given decline in service quality varies with the earnings variance. If the earnings variance is negative or only slightly positive, the penalty for very poor service quality would be zero or negligible.

#### Réponse :

Confirmed. However, this statement in the form of an interrogatory requires further comment. HQT's proposed mechanism addresses a concern that may be associated with the transition to an MRI plan. It presumes that HQT, or utilities more generally, have an incentive to pursue efficiency gains at the expenses of service quality under a multi-year MRI plan.

As stated in HQT's evidence:

1           In its decision D-2018-001<sup>5</sup>, the Régie accepted the inclusion of an  
2           MTER in the MRI of the Transmission Provider. The Régie is of the  
3           opinion that the purpose of establishing an MRI is to encourage the  
4           Transmission Provider to be more efficient, without however  
5           affecting the quality of the service. In this respect, it recalls its  
6           position, previously expressed, that it wants to ensure that the  
7           quality of service is maintained and that excess returns are not made  
8           to the detriment of the security of the network or the customer  
9           service<sup>6</sup>.

10          In fact, HQT has sufficient motivation to maintain and improve service quality  
11         without any financial penalty. HQT's proposal is responsive to the concerns  
12         expressed by the Régie in D-2018-001. HQT will absorb 100% of any earnings  
13         shortfall and will not receive any extra earnings from service quality  
14         performance that exceeds the target. HQT has sufficient incentive to pursue  
15         efficiency gains and maintain service quality throughout each performance  
16         year in order to realize its full share of upside earnings. Sharing with  
17         customers begins when the IMQ is less than -1, decreasing by 1% for each  
18         1/100th of a decrement in the index. It should be noted that the calculation of  
19         the MTER is performed after the performance year has concluded.

20          Réponse du Transporteur

21          La proposition du Transporteur respecte le cadre fixé par la Régie<sup>7</sup>.

22          La Régie a opté pour un mécanisme de liaison d'indicateurs de qualité du  
23         service au MTÉR afin de s'assurer que les gains d'efficience ne soient pas  
24         réalisés au détriment de la sécurité du réseau ou du service à la clientèle.  
25         Le maintien de la qualité du service est donc la condition préalable à l'accès  
26         pour le Transporteur à la part des écarts favorables à laquelle il est éligible  
27         en vertu du mécanisme de partage autorisé par la Régie dans sa décision  
28         D-2014-034<sup>8</sup>. Le Transporteur rappelle que le MTÉR est asymétrique (les écarts  
29         défavorables étant entièrement à la charge du Transporteur) et sans zone  
30         morte.

31          Dans ce contexte, en cas de surperformance en matière de qualité de service,  
32         la proposition du Transporteur ne prévoit pas de bonification au-delà de la part  
33         à laquelle il est éligible en vertu du MTÉR existant. Il n'est pas non plus de la  
34         compréhension du Transporteur qu'il pourrait invoquer une performance  
35         exceptionnelle en termes de qualité de service pour récupérer auprès de sa  
36         clientèle d'éventuels écarts défavorables dans le MTÉR.

37          De même, en cas de sous-performance en regard de la qualité de service,  
38         toujours suivant cette logique d'arrimage au MTÉR existant, la proposition du  
39         Transporteur ne prévoit pas de pénalités en sus d'un accès réduit, voire nul, à  
40         la portion des écarts favorables auxquels il est éligible en vertu du mécanisme  
41         de partage retenu par la Régie.

<sup>5</sup> D-2018-001, paragraphes 130.

<sup>6</sup> D-2018-001, paragraphes 155.

<sup>7</sup> D-2017-043, paragraphes 416 à 420 ; D-2018-067, paragraphes 8 à 10.

<sup>8</sup> D-2014-034, pages 90 à 93.

1       Ainsi, c'est effectivement la part des écarts favorables à laquelle le  
2       Transporteur a accès en vertu du MTÉR existant, si faible soit-elle,  
3       qui conditionne l'ampleur du montant à associer à la performance du  
4       Transporteur en matière de qualité de service.

5       Ceci étant, le Transporteur a offert des services de qualité à ses clients au  
6       cours des dernières années, et cela sans autre forme d'incitatif.

- 8.2      Why is it desirable to link service quality only to positive earnings variances?  
Since negative or slightly positive earnings variances can easily occur during an MRI, doesn't this weaken the Company's incentive to maintain quality?

Réponse :

7       Under HQT's proposal, HQT absorbs 100% of earnings shortfalls. HQT has  
8       both a financial incentive and customer relationship incentive to maintain  
9       service quality at every earnings level, positive or negative.

- 8.3      Why does the IMQ assign equal weight to the four service quality areas? Please provide studies that the Company has commissioned or is aware of which estimate the value of transmission reliability. Please also provide studies that the Company has commissioned or is aware of that appraise the relative importance to customers of reliability and other characteristics of transmission service.

Réponse :

10       Le Transporteur n'a pas cherché à prioriser un ou des champs d'intervention  
11       au détriment des autres, ou en fonction de l'importance relative de chacun.

12       L'objectif du MRI étant d'inciter le Transporteur à une plus grande efficience  
13       sans toutefois porter atteinte à la qualité de service, il estime que le maintien  
14       de la qualité de service doit se vérifier dans chaque champ d'intervention.

15       En ce qui a trait à la valeur de la fiabilité, le Transporteur a déposé dans le  
16       dossier R-4012-2017 un rapport de la firme Roland Berger<sup>9</sup> dans lequel cette  
17       dernière calcule la « Value of Lost Load » (VOLL). Toutefois, ce rapport visait  
18       l'analyse coûts-bénéfices de la maintenance additionnelle, et non l'évaluation  
19       de la qualité de service rendu à la clientèle.

20       Le Transporteur est donc d'avis que les quatre champs d'intervention retenus  
21       par la Régie permettent d'évaluer plus globalement la qualité de service  
22       (fiabilité, disponibilité, sécurité et satisfaction).

<sup>9</sup> Analyse coûts-bénéfices de la maintenance additionnelle demandée par Hydro-Québec TransÉnergie, Rapport de Roland Berger, 31 juillet 2017.

- 8.4 Article 48.1 of the Loi sur la Régie de l'Energie states that incentive regulation must promote, among other things, “ongoing improvement in performance and service quality.” Does the proposed mechanism encourage improved service quality? If so, how?

**Réponse :**

1           **HQT elected not to propose an incentive that would reward itself for service**  
2           **quality performance that exceeds a benchmark threshold. Moreover,**  
3           **a threshold that represents stretch performance or encourages the utility to**  
4           **make investments that are reflected in the cost of service may not be**  
5           **desirable for the utility in the short-term and the customers in the**  
6           **longer-term.**

## **9. Référence : HQT-4 Document 2**

### **Préambule :**

The Company proposes to base the customer satisfaction score on the outcomes of satisfaction surveys for *Hydro-Québec dans ses activités de distribution d'électricité* and *les clients du service de point à point*.

The Company proposes the following two *fiabilité du service* metrics:

- *Indicateur Nombre de pannes et interruptions planifiées*
- *Indicateur Indice de continuité (IC – Opérationnel) normalisé*

The Company proposes one *disponibilité du réseau* metric:

- *Indisponibilités forcées*

The Company proposes one *sécurité du public et des employés* metric:

- *Taux de fréquence des accidents*

### **Demandes:**

- 9.1 Please provide the customer satisfaction survey questions and a table with five years of survey results (to the extent available). What are the weights on the individual questions?

**Réponse :**

7           **Le questionnaire utilisé pour évaluer la satisfaction du client Hydro-Québec**  
8           **Distribution est composé de cinq sections, regroupant les thèmes présentés**  
9           **ci-après. La note globale du Distributeur représente la moyenne arithmétique**  
10          **des notes obtenues pour chacune des cinq sections.**

- 1           **A. Plan des charges et des ressources du Distributeur**
- 2           • Étude de pointe annuelle du réseau de transport
- 3           • Intégration des ressources dans le cadre des appels d'offres et des
- 4           programmes d'achat du Distributeur
- 5           • Suivi d'exploitation des centrales en service
- 6           • Transmission des caractéristiques des postes satellites
- 7           • Solutions aux problèmes de capacité des postes satellites et lignes
- 8           haute tension ainsi qu'au manque de départs de ligne identifiés par le
- 9           Distributeur
- 10          • Synchronisation des travaux pour le dépôt à la Régie de l'énergie des
- 11          projets d'investissements communs
- 12          **B. Exploitation et Relations territoriales**
- 13          • Gestion de la pointe (gestion des abaisseurs de tension de postes,
- 14          des priorités de délestage des lignes, des plans de contingence requis)
- 15          • Communication lors de situations d'urgence et d'événements majeurs
- 16          en transport
- 17          • Impact client (respect des cibles et engagements en matière de
- 18          continuité de service, d'interruptions planifiées, de qualité de l'onde)
- 19          • Interventions sur le réseau – planification et coordination avec le
- 20          Distributeur et ses clients
- 21          **C. Gestion de l'équilibre offre-demande**
- 22          • Programmation des ressources du Distributeur
- 23          • Accessibilité des données requises (statistiques des besoins réels et
- 24          données météo) pour la prévision et le suivi de la demande au Québec
- 25          • Application des programmes commerciaux pour la clientèle Affaires du
- 26          Distributeur (puissance et électricité interruptible)
- 27          **D. Clients du Distributeur raccordés en transport**
- 28          • Raccordement d'une nouvelle installation de client (ou d'un
- 29          accroissement de charge)
- 30          • Traitement des clients déjà raccordés au réseau de transport et des
- 31          clients majeurs raccordés en distribution (conversion de tension,
- 32          mesures d'atténuation d'impacts lors d'interruptions planifiées)
- 33          **E. Service de transport de type point à point**
- 34          • Qualité des services de transport fournis de type point à point par le
- 35          Transporteur
- 36          • Service à la clientèle, facturation et communication

1           Le questionnaire utilisé pour évaluer la satisfaction des clients de point à  
2           point est composé de trois sections, regroupant les thèmes présentés  
3           ci-après. La note globale d'un client représente la moyenne arithmétique des  
4           notes obtenues pour chacune des trois sections.

5           **A. Les services de transport fournis par le Transporteur**

- 6           • **Service point à point**
- 7           • **Études d'impact – Demande de service de transport**
- 8           • **Projets résultant d'études d'impact**
- 9           • **Planification et optimisations des retraits**

10          **B. Le service à la clientèle, la facturation et la communication**

- 11          • **Service à la clientèle**
- 12          • **Facturation**
- 13          • **Communication**

14          **C. L'appréciation générale du client**

- 15          • **Engagement du Transporteur à l'approche client**
- 16          • **Suivi du plan d'actions de la période précédente.**

17          Les résultats pour les clients point à point sont présentés à la pièce HQT-3,  
18          Document 2 ainsi que les résultats pour le client Hydro-Québec Distribution  
19          pour les années 2016 et 2017.

20          En ce qui concerne les résultats des années antérieures pour HQD et tel que  
21          précisé dans l'annexe B de la pièce HQt-4 document 2, il n'y a pas de données  
22          relatives aux années 2011-2015 comparables puisque une révision de la  
23          méthode d'évaluation a été réalisée en 2016.

9.2       What is the Transmitter's definition of a sustained interruption for each indicator?  
For example, how long must an interruption be before it is sustained? Are planned  
interruptions included in the indicateur indice de continuité normalisé? Are  
outages caused by generation included as interruptions in any indicator?

Réponse :

24          Les indicateurs de fiabilité utilisés dans le cadre du MRI incluent des  
25          interruptions momentanées ainsi que des interruptions soutenues. Les deux  
26          indicateurs tiennent également compte des interruptions planifiées.  
27          Finalement, les interruptions générées par les producteurs sont aussi  
28          considérées dans ces deux indicateurs.

- 9.3 Does HQT participate in any transmission service quality (or just reliability) benchmarking undertaken by the CEA? If so, please provide the latest results in as much detail as the confidentiality restrictions of the study allows. Please also provide the CEA's latest report on Canadian transmitter performance.

**Réponse :**

1       **Le Transporteur participe à l'exercice du balisage de l'Association canadienne**  
2       **de l'électricité (« ACÉ ») coordonné par le groupe de travail portant**  
3       **l'appellation Best Practice Working Group (« BPWG »). Les indicateurs qui en**  
4       **découlent sont présentés à la pièce HQT-3, Document 3 du présent dossier.**  
  
5       **L'ACÉ commercialise certains rapports relatifs à la fiabilité des transporteurs**  
6       **canadiens. Par conséquent, le Transporteur réfère l'intervenant à l'ACÉ pour**  
7       **obtenir ces rapports.**

- 9.4 Can the Company provide the transmission service quality metrics for different regions of the service territory? If so, what are some feasible regional breakdowns?

**Réponse :**

8       **La proposition du Transporteur répond à la demande de la Régie D-2018-001 et**  
9       **implique des indicateurs qui couvrent l'ensemble du réseau de transport.**  
10      **Il n'est pas possible de dériver les résultats de l'IMQ par région.**

- 9.5 The Régie has asked for metrics in the area of "sécurité du public et des employés". Why then has the Company not proposed a public safety metric?

**Réponse :**

11      **Dans la décision D-2018-001, la Régie indique que les indicateurs à présenter**  
12      **par le Transporteur dans la présente demande doivent s'inspirer de ceux**  
13      **utilisés actuellement dans le cadre de ses demandes tarifaires et dont**  
14      **l'historique est connu. Or, il n'y a aucun indicateur en lien avec la sécurité du**  
15      **public qui soit actuellement présenté par le Transporteur dans les demandes**  
16      **tarifaires et avec un historique connu.**

- 9.6 Please provide Table B-1 in Excel form with all formulas intact.

**Réponse :**

17      **Le tableau B-1 de la pièce HQT-4, Document 2, en format Excel, est déposé**  
18      **dans le Système de dépôt électronique (SDÉ) de la Régie.**

- 9.7 Does HQT participate in First Quartile's employee safety benchmarking? If so, please provide the latest results in as much detail as the confidentiality restrictions of the study allows.

**Réponse :**

- 1      **Le Transporteur ne participe pas au volet Sécurité des employés de l'exercice de balisage piloté par First Quartile Consulting.**  
2

## **10. Référence : HQT-4 Document 2**

**Préambule :**

The Company proposes to base the annual target of the *Indisponibilités forcées* over the term of the MRI on forecasts rather than a fixed historical average due to an expected upward trend over the next 4 years. The Company states on page 27:

« Toutefois, pour l'indicateur *Indisponibilités forcées (IF)*, le Transporteur propose l'utilisation de valeurs projetées considérant l'évolution à la hausse observée et celle prévue pour les prochaines années. Cette situation a déjà été reconnue par la Régie, qui a autorisé aux demandes tarifaires 2017 et 2018 une mise à niveau de la maintenance afin de permettre au Transporteur de contrôler cette hausse des IF. Dans ce contexte, plutôt que de lier l'évaluation de performance du Transporteur à une valeur fixe basée sur la moyenne des années 2013 à 2017 le Transporteur propose l'utilisation de valeurs projetées.

Considérant la corrélation entre les IF et le risque en maintenance, le Transporteur propose d'établir des cibles pour l'indicateur *Indisponibilités forcées (IF)* proportionnelles au profil d'évolution prévue du risque en maintenance.

En utilisant les valeurs historiques des IF et le profil d'évolution future du risque en maintenance, le Transporteur a donc été en mesure d'estimer l'évolution des IF correspondant à la stratégie de maintenance adaptée ».

**Demandes:**

- 10.1 Please explain the forecast model used to estimate the evolution of the IF targets.

**Réponse :**

- 3      **Voir la réponse à la question 13.1 de la demande de renseignements numéro 1 de l'AHQ-ARQ à la pièce HQT-13, Document 2.1.**  
4

### *Clause de Sortie*

#### **11. Références : HQT-4 Document 2**

##### **Préambule :**

The Company retained Concentric Energy Advisors ("CEA") to help it develop an appropriate *Clause de Sortie*. CEA documented some Canadian precedents for such clauses in Document 2.1 and recommended that the clause be triggered once the Company's rate of return on equity varied from its target by 150 basis points.

##### **Demandes:**

- 11.1 Please clarify the Company's proposal as to what happens if its ROE variance equals or exceeds 150 basis points. Is it proposing the immediate return to cost of service regulation (i.e., rates would be reset to the Company's expected cost of service in a forward test year) pending possible later development of a new MRI?

##### **Réponse :**

1       **Yes. As a practical matter, the determination that the off-ramp is triggered will**  
2       **not be made until May of the subsequent year when the Annual Report is**  
3       **filed. HQT would file a proposal for new rates based on the forecasted cost of**  
4       **service, with the new rates to take effect on January 1st of the next**  
5       **year. HQT would include a proposal on how to handle the "gap" year during**  
6       **which rates would continue to be established by application of the MRI**  
7       **formula. The Régie would make a final determination as part of the rate case**  
8       **review process.**

- 11.2 CEA's survey states on p. 21 that "once an exit clause is triggered, the PBR plan is usually suspended for review or terminated." Please explain what is meant here by "suspended for review". In what sense is the MRI suspended during the review? Please note which of the MRIs surveyed by CEA have this provision. Please explain what happens if the off ramp/reopener provisions in the four gas MRIs are triggered.

Réponse :

1        In the reference noted above, “suspended for review” implies that a  
2        regulatory review of the PBR plan in place will be initiated by either the  
3        company or the regulator to determine when and how to adjust the plan such  
4        that it produces satisfactory results for both customers and the company  
5        (i.e., results within the off ramp parameters).

6        Among the utilities shown in Tables 1 and 2 of our report, ENMAX (in its 2007  
7        plan) and the Ontario utilities have provisions to either “address the issue  
8        that triggered the re-opening” or “initiate a regulatory review.” Additionally,  
9        the generic PBR framework in Alberta warrants “consideration of a  
10      reopening and review of a PBR plan” when the basis point threshold is  
11      triggered. In British Columbia, before a plan is terminated it is reviewed to  
12      address potential remedies.

13      For gas distributors, as discussed above the generic PBR framework in  
14      Alberta warrants “consideration of a reopening and review of a PBR plan”  
15      when the basis point threshold is triggered. The specifics of Alberta’s PBR  
16      reopener provisions are discussed on pages 71-75 of AUC D-20414-D01-2016.  
17      The reopener is not automatic, rather it may be initiated by the company or by  
18      the Commission.

19      In British Columbia, FEI’s off ramp sets “in motion a two-stage process.  
20      The first stage consists of a process before the Commission to assess  
21      potential remedies to the situation, including the potential for amending or  
22      re-calibrating the PBR plan to allow it to continue. A second stage to the  
23      process would be triggered if satisfactory solutions could not be found  
24      through modification of the PBR plan. This stage would deal with how to exit  
25      from the plan. This could include a variety of options from going back to a  
26      cost of service methodology to a redesign of the PBR.”<sup>10</sup>

27      In Ontario, Enbridge’s 2008 PBR plan included a provision for the Company  
28      to file an application with the OEB for a prospective review of its adjustment  
29      formula.<sup>11</sup> In Enbridge’s subsequent plan, the OEB is to “monitor Enbridge’s  
30      results and carry out a review if Enbridge over-earns or under-earns more  
31      than 300 basis points.”<sup>12</sup>

11.3     What is the typical ESM provision in 4th generation (non-custom) IRMs for power  
distributors in Ontario?

<sup>10</sup> BCUC Decision for FEI, September 15, 2014, pp. 159-160.

<sup>11</sup> EB-2007-615, p. 25.

<sup>12</sup> EB-2012-0456, July 14, 2014, p. 20.

Réponse :

1        The Ontario 4<sup>th</sup> Generation IR plans (non-custom) do not have an ESM  
 2        provision. Instead, the OEB considers the productivity factor and stretch factor  
 3        as means to share benefits with customers.

4        See Table 1 in the OEB's Renewed Regulatory Framework for Electricity,  
 5        October 18, 2012, p. 13:

Table 1: Rate-Setting Overview - Elements of Three Methods

	4 <sup>th</sup> Generation IR	Custom IR	Annual IR Index
<b>Setting of Rates</b>			
"Going in" Rates	Determined in single forward test-year cost of service review	Determined in multi-year application review	No cost of service review, existing rates adjusted by the Annual Adjustment Mechanism
Form	Price Cap Index	Custom Index	Price Cap Index
<b>Coverage</b>			
Annual Adjustment Mechanism	Inflation	Composite Index	Composite Index
	Productivity	Peer Group X-factors comprised of: (1) Industry TFP growth potential; and (2) a stretch factor	Based on 4 <sup>th</sup> Generation IR X-factors
Role of Benchmarking	To assess reasonableness of distributor cost forecasts and to assign stretch factor	Distributor-specific rate trend for the plan term to be determined by the Board, informed by: (1) the distributor's forecasts (revenue and costs, inflation, productivity); (2) the Board's inflation and productivity analyses; and (3) benchmarking to assess the reasonableness of the distributor's forecasts	n/a
<b>Sharing of Benefits</b>			
Sharing of Benefits	Stretch factor	Case-by-case	Highest 4 <sup>th</sup> Generation IR stretch factor
Term	5 years (rebasing plus 4 years).	Minimum term of 5 years.	No fixed term.
Incremental Capital Module	On application	N/A	N/A
Treatment of Unforeseen Events	The Board's policies in relation to the treatment of unforeseen events, as set out in its <a href="#">July 14, 2008 EB-2007-0673 Report of the Board on 3<sup>rd</sup> Generation Incentive Regulation for Ontario's Electricity Distributors</a> , will continue under all three menu options.		
Deferral and Variance	Status quo	Status quo, plus as needed to track capital spending against plan	Disposition limited to Group 1 Separate application for Group 2
Performance Reporting and Monitoring	A regulatory review may be initiated if a distributor's annual reports show performance outside of the ±300 basis points earnings dead band or if performance erodes to unacceptable levels.		

## ***Etude PMF***

### **12. Références : HQT-4 document 2 pp. 9-10**

#### **Préambule :**

HQT was required by the Régie to discuss its plan for a study of *productivité mulifactorielle* (“PMF”) in this proceeding. This discussion was supposed to encompass the methodology as well as the schedule for the study. The Company states on p. 9 that

*Le choix de l'expert qui réalisera l'étude de productivité n'est pas encore connu. Il est donc prématué pour le Transporteur, à ce point-ci, de proposer une méthodologie à employer pour produire son étude PMF.*

A presentation of the proposed methodology is scheduled to occur in the third quarter of 2019, several months after the consultant is retained.

#### **Demande:**

- 12.1 Is it the Company's view that the Régie and stakeholders should not provide any guidance concerning the methods used in the PMF study prior to the commencement of work by the consultant?

#### **Réponse :**

- 1      **Voir la réponse à la question 2.2 de la demande de renseignements numéro 1 d'OC à la pièce HQT-13, Document 6.1.**
- 2
- 3      **Voir également la réponse à la question 1.1 de la demande de renseignements numéro 1 d'OC, à la pièce HQT-13, Document 6.1.1.**
- 4