Réponses du Distributeur et du Transporteur à la demande de renseignements numéro 1 de Option consommateurs (« OC »)

DEMANDE DE RENSEIGNEMENTS N° 1 D'OPTION CONSOMMATEURS (OC) À HYDRO-QUÉBEC DANS SES ACTIVITÉS DE DISTRIBUTION ET TRANSPORT (HQDT)

ÉTABLISSEMENT D'UN MÉCANISME DE RÉGLEMENTATION INCITATIVE ASSURANT LA RÉALISATION DE GAINS D'EFFICIENCE PAR LE DISTRIBUTEUR D'ÉLECTRICITÉ ET LE TRANSPORTEUR D'ÉLECTRICITÉ

R-3897-2014 – PHASE 1

MRI FOR HQD

1. References: i) C-HQT-HQD-0023, p. 10.
ii) C-HQT-HQD-0023, p. 14.

Preamble:

(i) "HQD's OPEX represent 10.5% of revenue requirement for 2016. The majority of OPEX or "Envelope Expenses" has been subject to the parametric formula and considered to be meaningfully within management's general control. Operating Expenses excluded from the Envelope are called "Specifically Tracked Items", and represent around 22% of Operating Expenses."

(ii)

Figure 8: HQD Proposed Plan Parameters

Plan Feature	Proposed Parameters*
Term	3 forecast rate years
Coverage	OPEX (currently included in the present parametric formula) Corporate expenses Taxes Amortization expenses (excluding weather normalization and Energy efficiency programs)
Capital Plan	Capital projects approved as they are today: greater than $10M approved on a project-by-project basis; less than $10M as part of a yearly investment budget.
Exclusions	Specifically Tracked Items (OPEX beyond the control of the Distributor or other specific budgets) Energy efficiency programs (CAPEX) Return on rate base
Revenue Requirement Determination	Indexed-based revenue cap on covered expenses adjusted for customer growth plus exclusions, and adjustments for Y and Z factors
Inflation factor	Weighted combination of the Distributor's labor inflation and Canada's general inflation, similar to current inflation measure
Productivity (X factor)	Estimated with appropriate consideration of HQD's operating circumstances (see the following section)
Variance/Deferral Accounts	Y Factors to allow for annual adjustments in revenue requirements based on those currently recognized by the Régie (e.g., electricity purchases (pass-on), transmission costs, pension costs, weather normalization, fuel cost, etc.)
Earnings Sharing	To be aligned with the overall MRI ratemaking framework and linked to SQI results
Off-Ramp	Yes, expressed as +/-range from allowed ROE
Service Quality Thresholds	Yes, limited number of performance indicators to be linked to earnings sharing
Autonomous Networks	Covered under the I-X formula (as they are today under the parametric formula)
Unanticipated Events	Z Factors to allow for unanticipated/exogenous events outside of management's control

** Some other features, such as a carry-over mechanism, could be evaluated and incorporated in a subsequent term of HQD MRI.*

Request:

1.1 Please confirm that all "Specifically Tracked Items" are outside of HQD management's general control. If not, please specify.

R1.1

The "Specifically Tracked Items" ("activités de base avec facteurs d'indexation particuliers" and "éléments spécifiques") are not all outside HQD's control. Indeed, as mentioned in exhibit HQTD-3 Document 1, page 15, these elements correspond to costs beyond the control of HQD OR arising from new external requirements (laws, decrees, network obligations) OR from extraordinary costs or ties to new activities not anticipated in the budgets of previous years, OR also to temporary costs arising from investments generating gains in some cases. These must be treated separately because their costs do not evolve according to an "I-X" formula.

1.2 Please provide a complete list of items that should be included as Y factors for HQD's MRI.

R1.2

Elements included in the Y and Z factors are detailed in Table A1-1 in Appendix A of exhibit HQTD-3, Document 1, on page 33. This level of detail is sufficient for purposes of Phase 1.

1.3 Please specify the criteria and provide the complete list of items that should be included as Z factors for HQD's MRI.

R1.3

See response to Question 1.2.

MRI FOR HQT

2. References: i) C-HQT-HQD-0023, p. 17.

Preamble:

(i) "These challenges are documented in the Elenchus report, and are present for distribution utilities as well, but even more so for transmission companies, such as HQT, where capital represents the vast majority of its revenue requirements. Concentric is not aware of any North American jurisdiction that has adopted an MRI program for a transmission specific entity. Where capital expenditures are large and uneven, a typical I-X program would be a poor fit. This suggests that the Régie should give very careful consideration to HQT's specific characteristics in choosing an MRI."

Request:

2.1 Please provide a list of references for other North American transmission companies with MRIs.

R2.1

CEA is not aware of any North American jurisdiction that has adopted an MRI program for a transmission specific entity.

2.2 Please provide a list of integrated utilities that have MRIs for both transmission and distribution activities.

R2.2

As noted above, CEA is not aware of any North American jurisdiction that has adopted an MRI program for a transmission specific entity. In British Columbia, FortisBC Inc.'s integrated operations include generation, transmission and distribution services and operate under an incentive plan that includes OPEX and sustaining capital.

In the US, Consolidated Edison's transmission and distribution services are typically regulated under a three-year rate plan if such an outcome is achieved through a rate case settlement process.

As referenced in response to AQCIE-CIFQ Question 2.3 in HQTD-4, Document-3: a report authored by Dr. Lowry, "Alternative Regulation for Emerging Utility Challenges: An Updated Survey", contains references to multi-year rate plans in Table 8, some of which are categorized as "Bundled Power Service" and have included various forms of incentivized structures including rate freezes, stairsteps, price caps, revenue caps and hybrid approaches.

2.3 Please provide a list of transmission companies with some type of multi-year cost of service similar to what Concentric is proposing for HQT. For each company, please indicate the comparable Building Block parameters (e.g. OPEX, CAPEX, indexing, etc…)

R2.3

See Attachment HQTD-4, Document 6.1 for examples in Norway, Australia and the U.K.

2.4 Please explain how capital volatility may be addressed in an MRI for transmission companies and provide relevant examples.

R2.4

See response to Question 2.3 above. See also responses to Régie Questions 9.1 and 9.2 in HQTD-4, Document 1.

The cost of service for transmission companies is dominated by the return on capital and amortization expense. Annual transmission company capital budgets, in contrast to many distribution budgets (excluding, for example, AMI initiatives), are dominated by large multi-year projects that frequently extend beyond the term of an existing rate plan. Concentric has proposed an approach that allows HQT to determine the optimal transmission investment plan to meet operational objectives and then incorporate under an MRI approach that drives efficiencies. An MRI should not lead to a smoothing of capital volatility if this approach contributes to a deviation from an optimal capital plan.

3. Référence: i) C-HQT-HQD-0023, p. 21.

Preamble:

(i) "Based on the goals of Article 48.1 and HQT's unique characteristics, Concentric recommends a "building block" MRI approach, which is a comprehensive "bottom-up" approach that sets a future revenue path based on a detailed forecast and review of capital and operating expenses."

Request:

3.1 Please explain what the building blocks would be in the multi-year cost of service revenue requirement formulation.

R3.1

At this point of Phase 1, the building blocks are planned to be the same components that make up the revenue requirement of the existing regulatory regime. These main blocks are: Return on Rate Base, Amortization, Operating Expenses and Other items. Costs associated with these building blocks would be projected for the entire three-year MRI period. They would only change if Y or Z factors allowed such changes.

3.2 Please explain how each of the building blocks forecasts will be determined.

R3.2

Components of the building block approach will be established with a traditional cast-off test year based determination of the cost of service, with subsequent years to be determined by forecast using the best information available at the time of filing.

3.3 Please explain how the load forecast will be factored into the revenue requirement forecast. Please explain how it will be adjusted annually.

R3.3

HQT would prepare a multi-year filing for the term of the MRI, including the forecast for transmission services to be updated in subsequent years of the plan.

3.4 Please explain how cost benchmarking will be used to determine appropriate productivity improvements.

R3.4

Best practices and cost benchmarking will be used to identify potential improvement areas that will be analysed for relevancy and prioritized for implementation. Considering the time delay required to implement an improvement in HQT's line of activity (ex. new IT system deployment, new technology deployment), the cost recovery of such an efficiency initiative can take several years. The forecasted efficiency gains of the prioritized improvements would be incorporated in the relevant building blocks.

4. References: i) C-HQT-HQD-0023, p. 22.

Preamble:

(i)

Figure 14: HQT Proposed Plan Parameters

Plan Feature	Proposed Parameters*
Term	3 forecast rate years
Coverage	Comprehensive including full revenue requirements, with exceptions for costs beyond management's control
Capital Plan	Capital projects approved as they are today: greater than $25M approved on a project-by-project basis; less than $25M as part of a yearly investment budget.
Revenue Requirement Determination	Multi-year projection of full revenue over term of MRI plan, updated for changes in expenses beyond management's control and for demand for transmission services
Inflation factor	Embedded in revenue requirement forecast
Productivity	Embedded in revenue requirement forecast
Variance/Deferral Accounts	Y Factors to allow for annual adjustments in revenue requirements for costs beyond management's control based on what is currently recognized by the Régie (e.g., pension costs, point to point transmission service revenues, costs related to projects pending approval by the Régie, penalty revenues related to ancillary services.)
Earnings Sharing	To be aligned with the overall MRI ratemaking framework and linked to SQI results
Off-Ramp	Yes, expressed as +/-range from allowed ROE
Service Quality Thresholds	Yes, limited number of performance indicators to be linked to earnings sharing
Unanticipated Events	Z Factors to allow for unanticipated/exogenous events outside of management's control

** Some other features, such as a carry-over mechanism, could be evaluated and incorporated in a subsequent term of HQT MRI.*

Request:

4.1 Please provide a complete list of items that should be included as Y factors for HQT's MRI.

R4.1

Le détail demandé excède le périmètre de la phase 1 du présent dossier fixé par la Régie dans la décision D-2015-103. Toutefois, par courtoisie, le Transporteur réfère l'intervenant à l'annexe A, Tableau A1-2 de la pièce HQTD-3, Document 1 où il présente de façon sommaire les éléments pouvant faire l'objet d'ajustements annuels.

Le Transporteur précise qu'en plus des éléments faisant l'objet d'ajustements annuels indiqués dans ce tableau, il est prévu que le coût de la dette soit également ajusté annuellement, conformément à la demande de la Régie formulée dans sa décision D-2014-034, paragraphe 273.

4.2 Please specify the criteria and provide the complete list of items that should be included as Z factors for HQT's MRI.

R4.2

Le détail demandé excède le périmètre de la phase 1 du présent dossier fixé par la Régie dans la décision D-2015-103. Toutefois, par courtoisie, le

Transporteur réfère l'intervenant à l'annexe A, Tableau A1-2 de la pièce HQTD-3, Document 1 où il présente de façon sommaire les éléments pouvant faire l'objet d'ajustements ponctuels.

PRODUCTIVITY STUDY

5. Référence: i) C-HQT-HQD-0023, p. 23.

Preamble:

(i) "There are alternative ways to derive "X" that range from the application of judgment applied to past observed productivity gains to industry benchmarking studies to complex productivity studies. Both benchmarking studies and productivity analyses rely on large data sets comprised of data for utilities that are deemed to be sufficiently "comparable". For a Canadian utility, this usually requires expanding the data set to include utilities from the United States in order to arrive at an acceptable sample size. A desire for a larger sample size in order to improve statistical validity and the desire for comparability tend to work against each other. This contributes to the controversy associated with productivity studies, particularly in Canada. In addition, these studies tend to add complexity and delays to the process, which goes against the streamlining goal of Article 48.1."

Request:

5.1 For each of the four methodologies (Total Factor Productivity Study, Partial Factor Productivity Study, Benchmarking and Judgment), provide a list of utilities and which methodology(ies) they use to determine the "X" factor.

R5.1

Concentric offers the following examples where utilities and/or jurisdictions have determined the « X » factor using one of four methodologies.

<u>TFP</u>

- **Alberta – the Alberta Utilities Commission called for the use of a NERA TFP study based on U.S. electric utilities from 1972-2009 in its generic MRI decision. Alternative studies were presented by the utilities and intervenors. Ultimately, the AUC determined productivity factors based on a combination of these sources and its judgment.**

<u>PFP</u>

- **Ontario – Concentric Energy Advisors prepared a partial factor productivity (PFP) analysis for Enbridge Gas Distribution that was filed in OEB docket EB-2012-0459. It is important to note that Concentric's X factor recommendation reflected the results of this PFP study and a TFP study that was also performed by Concentric.**
- **Maine – PEG prepared a "multi factor productivity" (MFP) analysis for Central Maine Power that was filed in Docket No. 2013-00168.**

Benchmarking

- **Norway – Norwegian Water Resource and Energy Directorate (NVW) – Elenchus notes that rates in Norway have been set using an MRI regime since 1997[1]. The regime operates through a revenue cap that uses international benchmarking for establishing its allowed revenue.**

Judgment

- **In Concentric's experience, and based on our research, regulators apply judgment in the determination of X factors employed in MRI programs. These X factors may be informed by productivity studies and other evidence submitted by parties. As illustrated in the information provided in response to Régie Question 4.2, this judgement is necessary as a result of the significant differences in methodology, data, proxy groups, time periods, and assumptions of the analyst. A key parameter associated with the X factor is a stretch factor. As summarized by PEG in its report for the OEB: "In practice, North American regulators have chosen the values for stretch factor almost entirely on the basis of judgment."[2]**

6. Référence: **i)** **C-HQT-HQD-0023, p. 24.**
ii) http://www.hydroone.com/RegulatoryAffairs/Documents/EB-2014-0140%20Tx%20Rates%202015/HONI%20Stakeholder%20Consultation%20Notes,%20February%2011%202015.pdf

Preamble:

(i) "Benchmarking studies face many of these same challenges. There is an important distinction, however. Benchmarking studies inform the determination of "X", along with other relevant information and the application of judgment; productivity studies produce an estimate of "X" that frequently begins a lengthy, costly, and complicated discussion of all aspects of the study (or studies in many jurisdictions)."

Request:

6.1 Please discuss the challenges facing benchmarking studies.

R6.1

See page 24 of the Concentric report for a discussion of the challenges facing benchmarking studies.

6.2 Please clarify your position on whether benchmarking studies only inform the "X" factor and/or whether benchmarking is also useful for setting forecasts in a building block approach.

[1] Performance-based regulation – A review of design options as background for the review of PBR for Hydro-Québec Distribution and Transmission divisions, Elenchus Research Associates, Inc., January 2015, page 11

[2] Productivity And Benchmarking Research In Support Of Incentive Rate Setting In Ontario: Final Report To The Ontario Energy Board, November, 2012, p. 14.

R6.2

It is possible to use benchmarking to inform the X-factor as part of the judgment approach recommended by Concentric to establish the MRI of HQD. Theoretically, one could also benchmark HQT's OPEX and CAPEX. However, benchmarking would require an appropriate group of comparator companies and publicly available data in order to do so. Even then, the sample of companies would have to be reconciled for HQT's unique operating circumstances. See responses to Question 3.4 and 6.3 and AQCIE-CIFQ Question 12.9 in HQTD-4, Document 3.

6.3 Please provide specific examples of the uses of benchmarking.

R6.3

Benchmarking studies are used in both competitive and regulated industries to calibrate costs and identify areas of potential efficiency gains. The most valuable studies are those where a group of participating companies have agreed to participate and share detailed operating and cost data, and an intermediary serves the role of compiling the data, ensuring consistency and quality of results, and protecting the confidentiality of individual participants. Selection of the participating companies is an important determinant of the reliability of the results, along with the quality and consistency of the collected data.

Benchmarking studies are conducted across many industries. For example, Solomon Associates conducts studies in the following sectors: refining, chemicals, upstream, integrated sites, liquid pipeline and terminals, natural gas, power generation, and reliability and maintenance.

Utility-specific examples include Florida Power and Light, who hired Concentric to conduct an analysis of its operational and financial performance through the use of a benchmarking study. Similarly, Tennessee Valley Authority was part of a benchmarking study on its nuclear units' staffing efficiency. In 2011, MJ Bradley & Associates completed benchmarking studies on Electric Utility Energy Efficiency Portfolios in the U.S. Additionally, Nexant examined performance benchmarks for electric distribution companies in South Asia.

HQT and HQD also participate in benchmarking studies each year. See response to Question 6.4 for a discussion of the types of indicators examined in these studies.

6.4 Please indicate whether Concentric is aware of any recent benchmarking studies in which HQD or HQT participated in. If so, provide the references and any results, preliminary or otherwise, from these studies.

R6.4

Concentric is aware that both HQD and HQT participate in benchmarking studies for various activities.

HQD participates in external benchmarking studies with First Quartile Consulting every year. The benchmarking is on both 1) power distribution activities and 2) customer service activities; the results are filed with the Régie in alternance. Starting with the 2016-2017 rate case, the Régie accepted HQD's

proposal to report on the external benchmarking results every 5 years[3]. Results from HQD's recent external benchmarking study are provided in Appendix A of HQD-2, document 1 of docket R-3905-2014. Indicators are provided for costs, service quality, and service continuity.

HQT participates in benchmarking studies every year, the results of which are filed in the company's rate cases. See HQT-3, Document 3 of docket R-3934-2015, for the most recent benchmarking study results. Results are provided for cost indicators such as "total expenditure per value of asset – line contribution" and "Spending on operating and maintenance per value of asset – line contribution" (Figures 1, 2). Reliability indicators are also examined in this study, including "SAIDI continuity index" (Figure 15).

6.5 Please confirm that HQT was approached to participate in the current Ontario Energy Board (OEB)-directed Hydro One Transmission benchmarking study mentioned in reference ii).

R6.5

Réponse du Transporteur

Le Transporteur a été sollicité par le baliseur afin de prendre part à l'étude de balisage sur les coûts de transport réalisée pour le compte d'Hydro-One.

6.6 Subsequent to this request, did HQT agree to participate or not. If so, provide the references and any results, preliminary or otherwise. If it did not, please explain the reasons for not participating.

R6.6

Réponse du Transporteur

Compte tenu du fait que le Transporteur participe déjà à deux études de balisage sur les coûts de transport d'électricité, celui-ci a décliné l'invitation à participer à l'étude réalisée pour le compte d'Hydro-One en raison de l'indisponibilité des ressources adéquates pour colliger les données selon une structure de coûts différente de l'un ou l'autre de ces balisages et soumettre les données dans les délais qui lui étaient accordés.

REGULATORY PROCESS AND FILING REQUIREMENTS FOR THE MRI

7. Référence: i) C-HQT-HQD-0023, p. 28.
ii) C-HQT-HQD-0023, p. 30.

Preamble:

(i) "At the outset, this third objective of Article 48.1 can be met in Phase 3 at the design stage of the MRI, by favoring, for example, simple approaches and a limited number of parameters."

(ii) "Concentric proposes a rebasing of rates, followed by a two-year MRI term for both HQD and HQT."

[3] Decision D-2015-018, paragraph 185; also paragraph 112 for additional requirements.

Request:

7.1 Please explain why a full test year cost of service review is not required for both HQD and HQT to establish the base year cost of service and rates.

R7.1

Concentric assumes that a full test year cost of service, to be determined by forecast, is and should be required to establish the first year of the MRI for both HQD and HQT.

7.2 With respect to HQD, please discuss if, rather than full cost of service, an indexed base year is or is not an approach that Concentric would support. If so, provide comments on which components of the revenue requirement would be indexed and how the indices would be developed and applied.

R7.2

See response to Question 7.1.

7.3 Please comment on a similar approach for HQT relative to a full cost of service test year for base year.

R7.3

See response to Question 7.1.

8. Référence: i) C-HQT-HQD-0023, p. 29.

Preamble:

(i) "Even though Hydro-Québec is moving toward a multi-year rate filing, HQD and HQT continue to provide annual filings."

Request:

8.1 Please list in tabular form the reporting proposed for both HQT and HQD relative to current reporting requirements.

R8.1

The request is out of scope as it deals with matters that will be addressed in phase 3.

8.2 Since Concentric has considerable experience with scorecards, please provide a strawman scorecard for each HQT and HQD.

R8.2

See response to Question 8.1.

8.3 Please indicate which scorecard performance parameters could include financial rewards/penalties and how these may be structured.

R8.3

See response to Question 8.1.