

**Réponses du Transporteur  
à la demande de renseignements numéro 2  
de Option Consommateurs  
(« OC »)**



1 **DEMANDE DE RENSEIGNEMENTS N<sup>o</sup> 1 D’OPTION CONSOMMATEURS (OC) À**  
2 **HYDRO-QUÉBEC DANS SES ACTIVITÉS DE TRANSPORT (HQT)**

3 **ÉTABLISSEMENT D’UN MÉCANISME DE RÉGLEMENTATION INCITATIVE**  
4 **ASSURANT LA RÉALISATION DE GAINS D’EFFICIENCE PAR LE**  
5 **DISTRIBUTEUR D’ÉLECTRICITÉ ET LE TRANSPORTEUR D’ÉLECTRICITÉ**

6 **R-3897-2014 – PHASE 1**

7 **REVISED MRI APPROACH FOR HQT**

- 8 **1. Références :** i) [C-HQT-HOD-0095](#), p. 6.  
9 ii) [R-3981-2016, B-0015](#), p. 3.  
10 iii) [R-3981-2016, B-0016](#), p. 8.

11 **Préambule :**

12 In reference i), Concentric Energy Advisors (CEA) provides the formula for the updated  
13 hybrid MRI proposal of HQT :

$$\text{Revenue Requirement}_{t+1} = \text{OPEX}_{t+1} + \text{Other Components}_{t+1} + Z_{t+1}$$

Where:

$$\text{OPEX}_{t+1} = [\text{OPEX}_t - \text{Specifically Tracked Items}_t] * [1 + (\text{Inflation}_{t+1} - \text{Efficiency})] + \\ \text{Growth}_{t+1} + \text{MGA}_{t+1} + \text{Adjustment for Recurring Activities}_{t+1} + \text{Specifically Tracked} \\ \text{Items}_{t+1}$$

Other Components = Adjustment for expenses subject to variance and deferral accounts beyond management’s control, Capital Charges, and Other Residual Items,<sup>12</sup> where:

$$\text{Capital Charges} = \text{Amortization} + (\text{Return on Rate Base} * \text{Rate Base}) + \text{Taxes}$$

14 Z = Adjustment for costs resulting from unanticipated/exogenous events outside of management’s control.

15 The most recent estimates of service delivery costs for years 2015 to 2017 are presented in  
16 Table 1 of reference ii). Also, Table 2 of reference iii) presents elements of the global  
17 parametric approach to setting the 2017 *Charges d’exploitation net* (CNE).

18 **Demandes :**

- 19 1.1 For each item in table 1 of reference ii), please specify to which cost category they  
20 refer under the hybrid formula proposed by CEA. Please specify if they are covered or  
21 not by “I-X”.

- 1 R1.1
- 2 Réponse de Concentric :
- 3 See table R1.1.

**Table R1.1**  
**Cost categories' covered by the I-X formula**

Cost category	Covered by the I-X formula
<b>Charges nettes d'exploitation</b> (note 1)	Y
• Charges brutes directes	Y
• Charges de services partagés	Y
• Coûts capitalisés	Y
• Facturation interne émise	Y
<b>Autres charges</b>	
• Achats de services de transport	N
• Achats d'électricité	Y
• Amortissement	N
• Taxes	N
<b>Autres revenus de facturation interne</b>	N
<b>Frais corporatifs</b>	N
<b>Comptes d'écarts</b>	
• Coût de retraite	N
• Pénalités liées aux services complémentaires	N
<b>Comptes de frais reportés</b>	
• Coûts de mises en service de projets non autorisés	N
• Passage aux PCGR des États-Unis	N
• Implantation et application des normes CIP v5	N
• Disjoncteurs PK prioritaires	N
• Disjoncteurs PK résiduels	N
<b>Intérêts reliés au remboursement gouvernemental</b>	N
<b>Facturation externe</b>	N

Table legend: Y: yes; N: no.  
 Note 1: Specifically tracked items part of OPEX are not subject to I-X.

1 1.2 Please provide a definition for the “MGA<sub>t+1</sub>” item of the formula in reference i).  
2 Please confirm “MGA<sub>t+1</sub>” consist of operating expenses only.

3 **R1.2**

4 **Réponse de Concentric :**

5 **MGA<sub>t+1</sub> is the adjustment to the previous-year OPEX for maintenance**  
6 **interventions on existing assets dictated by the MGA. It consists of operating**  
7 **expenses only.**

8 1.3 Please confirm “MGA<sub>t+1</sub>” is what is called “*Mise à niveau de la maintenance*” in table  
9 2 of reference iii). If not, please explain if “*Mise à niveau de la maintenance*” is  
10 included in the formula of reference i).

11 **R1.3**

12 **Réponse de Concentric :**

13 **CEA confirms that “MGA<sub>t+1</sub>” is what is called “*Mise à niveau de la maintenance*”**  
14 **in table 2 of reference iii).**

15 1.4 Please provide explanations as to why “MGA<sub>t+1</sub>” should be excluded from the I-X  
16 coverage.

17 **R1.4**

18 **Réponse de Concentric :**

19 **See responses to Questions Régie 1.3 et 3.4 in HQTD-8, Document 1.**

20 1.5 Please provide a definition for “*Adjustment for Recurring Activities*” in the formula of  
21 reference i). Please specify if “*Adjustment for Recurring Activities*” is part of the  
22 current revenue requirement framework and provide references.

23 **R1.5**

24 **Réponse de Concentric :**

25 **A definition for “*Adjustment for Recurring Activities*” is provided under**  
26 **« *Ajustement pour les activités récurrentes* » at page 9, lines 12 to 14 in**  
27 **HQTD-3, Document 1.1**

28 **See also responses to Questions Régie 1.3 and 3.4 in HQTD-8, Document 1.**

29 1.6 Please provide explanations as to why “*Adjustment for Recurring Activities*” should be  
30 excluded from the I-X coverage.

31 **R1.6**

32 **Réponse de Concentric :**

33 **See response to Question Régie 3.4 in HQTD-8, Document 1.**

34 1.7 Please confirm all CAPEX related costs are included in “*Capital charges*”.

1 **R1.7**

2 **Réponse de Concentric :**

3 **Confirmed, with the exception of any capital-related cost recoveries under Y or**  
4 **Z exclusions.**

5 1.8 With the exception of changes made to the annual rate filings, please highlight in  
6 which ways the revised approach differs from the current regulatory framework in  
7 establishing the revenue requirement of HQT.

8 **R1.8**

9 **Réponse de Concentric :**

10 **The primary difference is the movement from a single forecast test year, based**  
11 **on cost of service, to a multi-year incentive rate plan for most operating**  
12 **expenses.**

13 **2. Références :** i) [C-HQT-HQD-0108](#), p. 7.

14 **Préambule :**

15 In reference i), HQT presents a table comparing HQD and HQT MRI features as proposed by  
16 CEA. For HQT, the “*I-X coverage*” would include “*Charges nettes d’exploitation (CNE)*  
17 *avec ajustements pour la croissance des activités, la pérennité (MGA) et les activités*  
18 *récurrentes (hormis les éléments de suivi particulier - coût de retraite et budget spécifique)*”.

19 **Demandes :**

20 2.1 Please confirm that “*ajustements pour la croissance des activités*”, “*pérennité (MGA)*”  
21 and “*activités récurrentes*” are not covered by the I-X formula.

22 **R2.1**

23 **Réponse de Concentric :**

24 **Confirmed.**

25 **TREATMENT OF CAPEX**

26 **3. Références :** i) **C-HQT-HQD-0095**, p. 7.

27 **Préambule :**

28 i) “*Capital trackers have been used to isolate the rate effects of certain types of*  
29 *expenditures, such as replacements for leak-prone pipe by gas distributors. Large*  
30 *capital projects may be separately tracked while smaller projects rolled into an I-X*  
31 *framework. Or, the utility may be allowed to apply for “K-factor” treatment for*

1 *projects deemed out of the ordinary course of business and beyond management's*  
2 *direct control. These latter examples are all derived from electric T&D or integrated*  
3 *utilities, or gas distributors in North America; none have been applied to a*  
4 *transmission specific entity."*

5 **Demandes :**

6 3.1 Please provide the list of utilities where "*Large capital projects may be separately*  
7 *tracked while smaller projects rolled into an I-X framework*".

8 **R3.1**

9 **Réponse de Concentric :**

10 **See response to Question AQCIE-CIFQ 2.2, HQT-8, Document 3, and**  
11 **specifically the case of FortisBC Inc.**

12 3.2 Please provide the list of utilities where there is a "*K-factor*" *treatment for projects*  
13 *deemed out of the ordinary course of business and beyond management's direct*  
14 *control*".

15 **R3.2**

16 **Réponse de Concentric :**

17 **Treatment of capital was an issue in the recently adopted PBR plan for**  
18 **Alberta's electric and gas distributors. In its decision, the AUC recognized:**

19 **"In addition, during the PBR proceeding, some of the parties expressed**  
20 **concern with the ability of an I-X mechanism to provide sufficient**  
21 **revenue to fund prudently incurred capital costs with respect to**  
22 **accelerated system modernization projects, externally driven projects,**  
23 **and capital expenditures required for a rapidly expanding distribution**  
24 **system. The capital tracker mechanism was included in the approved**  
25 **PBR plans by the Commission in response to this concern. This**  
26 **mechanism is intended to provide a company with additional revenue**  
27 **through a K factor adjustment to rates for the portion of a qualifying**  
28 **capital project's costs that would not be funded under the I-X**  
29 **mechanism."**

30 **Capital tracker treatment is an increasingly common practice and not limited to**  
31 **MRI programs. Trackers can also be used to track specific capital programs**  
32 **outside of periodic rate cases. Generally these programs respond to spending**  
33 **for reasons outside of the company's direct control, such as Government**  
34 **mandates, reliability or safety concerns, technological obsolescence, etc. The**  
35 **table provided in Attachment A contains examples of capital trackers currently**  
36 **or previously approved in other jurisdictions. These trackers represent a**  
37 **variety of capital spending needs for transmission and distribution-related**  
38 **projects.**

1 3.3 Please explain what are the benefits/shortcoming of those approaches, as opposed to  
2 excluding all of capital costs from I-X coverage as proposed by CEA in the hybrid  
3 framework.

4 **R3.3**

5 **Réponse de Concentric :**

6 The above-mentioned programs in BC and Alberta are applied to electric and  
7 gas distributors (FortisBC Inc. is an integrated utility with distribution,  
8 transmission and transmission assets). Alberta's program is relatively new, it  
9 has not been applied to transmission companies, and in all probability will  
10 change in its next generation. In the case of Fortis, this program follows an  
11 evolution of MRI programs that span decades. The earlier programs covered  
12 OPEX only, and have evolved with periods of cost-of-service regulation  
13 followed by next-generation MRI programs. The treatment of capital has been  
14 the result of a learning process between the company, the regulator, and  
15 stakeholders. The benefit of the current program is that this design has evolved  
16 over time, creating confidence among the parties that a proper balance of  
17 incentives and controls has been established.

18 The drawback, in terms of application to HQT, would be to adapt this program,  
19 or another designed to fit the unique capital requirements of a distribution  
20 company, to a transmission company such as HQT. HQT's MRI must take into  
21 account a long-term perspective that reflects the capital intensiveness of its  
22 business and the life cycle of the assets that make up its network. These  
23 characteristics differ substantially from typical distribution or integrated T&D  
24 utility. HQT must manage its capital related expenses in order to meet  
25 customer demands and ensure reliability and compliance with regulatory and  
26 statutory mandates. Therefore, the approach for HQT should provide sufficient  
27 revenue to fund capital investment costs without drawbacks.

28 4. Références : i) [C-HQT-HQD-0026](#), p. 25-28.

29 **Préambule :**

30 Forecasted investments for HQT for 2017 to 2026 are detailed in reference i). The amounts  
31 for the main categories are reproduced in the table below.



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
<b>Investissements ne générant pas de revenus additionnels</b>	<b>1158,5</b>	<b>1513,3</b>	<b>1096,6</b>	<b>1082,1</b>	<b>1047,3</b>	<b>1304,5</b>	<b>1396,9</b>	<b>1347,1</b>	<b>1480,9</b>	<b>1050,5</b>	<b>1050,5</b>
Maintien des actifs	910,5	849,7	822,2	855,7	894,8	938,4	1020,6	1177,1	1223,9	917,5	917,5
<i>(moins de 25 M\$)</i>	438,3	410,2	458,4	483,4	496,1	525,6	543,1	555,1	568,1	579,1	597,4
Maintien et amélioration de la qualité	137	266,5	255,8	208	134,5	348,1	358,3	152,0	239,0	115,0	115,0
<i>(moins de 25 M\$)</i>	50,9	55,8	54,0	52,0	50,3	50,0	58,0	60,0	60,0	60,0	60,0
Respect des exigences	111	397,1	18,6	18,4	18,0	18,0	18,0	18,0	18,0	18,0	18,0
<i>(moins de 25 M\$)</i>	35,8	17,1	18,0	18,0	18,0	18,0	18,0	18,0	18,0	18,0	18,0
<b>Investissements générant des revenus additionnels</b>	<b>416,7</b>	<b>805,2</b>	<b>677,6</b>	<b>453,5</b>	<b>-586,6</b>	<b>231,4</b>	<b>235,7</b>	<b>309,2</b>	<b>382,7</b>	<b>218,3</b>	<b>218,5</b>
Intégration de production et Interconnexions	443,6	552,1	530	159,5	-962,3	26,2	30,1	103,8	177,4	12,6	12,6
Croissance de charge locale	-26,9	253,1	147,6	294	375,7	205,2	205,6	205,4	205,3	205,7	205,9
<b>Investissements globaux</b>	<b>1575,2</b>	<b>2318,5</b>	<b>1774,2</b>	<b>1535,6</b>	<b>460,7</b>	<b>1535,9</b>	<b>1632,6</b>	<b>1656,3</b>	<b>1863,6</b>	<b>1268,8</b>	<b>1268,9</b>

1 **Demandes :**

2 4.1 In preparing the evidence, did HQT/CEA consider including capital charges of  
 3 investment projects under 25 M\$ under the I-X coverage ? If they were considered,  
 4 please specify the reasons for excluding them.

5 **R4.1**

6 **Réponse de Concentric :**

7 **No, this was not examined as an alternative because CEA was seeking to**  
 8 **develop a comprehensive solution for capital to accompany the I-X framework**  
 9 **for OPEX, while avoiding the introduction of additional complexity. Further, as**  
 10 **noted below in 4.2, the proposed hybrid model capitalizes on the existing**  
 11 **approval process for large and small projects by the Régie.**

12 4.2 In preparing the evidence, did HQT/CEA consider creating a separate capital tracker  
 13 for the investment categories “*Maintien des actifs*” et “*Maintien et amélioration de la*  
 14 *qualité*” ?

15 **R4.2**

16 **Réponse de Concentric :**

17 **No. HQT tracks and categorizes its capital investments according to the**  
 18 **following categories:**

- 19 **1) Asset sustainment ("Maintenance of assets" in the question)**
- 20 **2) Maintenance and improvement of service quality ("Maintenance and**  
 21 **improvement of quality" in the question)**
- 22 **3) Compliance**
- 23 **4) Growth**

1           **The capital investment costs of the first three categories are covered by all**  
2           **transmission customers, while the costs of the growth category are covered by**  
3           **the customer requesting the network upgrades. Concentric did not consider**  
4           **separating out just the first two categories, as the proposed hybrid model**  
5           **capitalizes on the existing approval process for large and small projects by**  
6           **the Régie.**

7   4.3   In preparing the evidence, did HQT/CEA consider creating a separate capital tracker  
8           for investments generating additional revenues?

9   **R4.3**

10       **Réponse de Concentric :**

11       **No. HQT establishes the cost of projects that create new revenues on a net**  
12       **cost basis (net of any customer contributions).**

13       **See also response to Question 4.2.**

## **Annexe A Réponse 3.2**



**Attachment R3.2  
Examples of capital trackers currently or previously approved  
in other jurisdictions**

<b>Jurisdiction</b>	<b>Category</b>	<b>Description</b>
<b>Colorado</b>	<b>Transmission</b>	PSCO and BHCE are permitted to recover, through a transmission cost adjustment, or TCA, clause, prudent costs incurred in planning, developing and completing construction or expansion of transmission facilities for which the PUC has granted a certificate of public convenience and necessity or has otherwise determined to be necessary. Through the TCA, the utilities may earn a cash return on construction work in progress for investments in grid reliability or new or upgraded transmission facilities. The TCAs are updated annually.
<b>Illinois</b>	<b>Government mandates</b>	ComEd has a rider in place to recover certain costs associated with relocating infrastructure in accordance with requirements imposed by local governments.
<b>Indiana</b>	<b>Infrastructure expansion, modernization</b>	State law allows the URC to authorize the utilities to implement a transmission, distribution and storage system improvement charge rider to facilitate recovery of the costs associated with certain electric and gas infrastructure expansion projects, including those intended to improve safety or reliability, modernize the utility's system, or improve an area's economic development prospects. The URC has approved such a rider for DEI, Indiana Gas, Southern Indiana Gas and Electric's gas operations and NIPSCO's electric and gas operations.
<b>Maryland</b>	<b>Grid resiliency, reliability improvement</b>	Potomac Electric Power, or Pepco, uses a grid resiliency charge to recover the costs associated with its accelerated-feeder-replacement program. A similar program and rider are in place for Delmarva Power and Light. A reliability improvement plan and an associated rider are in place for Baltimore Gas and Electric, or BGE. The company is required to file for approval of its incremental plans on an annual basis. Court review of the program is pending.
<b>Massachusetts</b>	<b>Capital additions</b>	<p>ME's decoupling mechanism includes a tracking mechanism to reflect capital investment of up to \$249 million (based on average of 2013, 2014, 2015 capital spending, including the cost of removal) and a cap on annual rate increases under the mechanism of 1% of total revenues, with any amounts above the 1% cap to be deferred for future recovery with carrying charges. Amounts over the cap are to be addressed in the company's next general rate proceeding. ME is also allowed to recover property taxes associated with plant additions through the tracking mechanism.</p> <p>A capital cost adjustment mechanism is in place for Fitchburg Gas and Electric's, or FG&amp;E's, electric division that permits the company to recover costs associated with post-test-year capital additions. The mechanism contains an annual spending cap of \$5.7 million and a cap on annual rate increases under the mechanism of 1% of total revenues, with any amounts above the 1% cap to be deferred for future recovery with carrying charges. To the extent that FG&amp;E's capital expenditures exceed the amount it is allowed to recover through the mechanism, the company can seek to include such investment in rate base in its next base distribution rate proceeding.</p>

<b>Jurisdiction</b>	<b>Category</b>	<b>Description</b>
<b>North Dakota</b>	<b>Transmission, environmental</b>	The electric utilities are permitted to earn a cash return on construction work in progress through a separate rate adjustment mechanism for investments in transmission infrastructure and for federally-mandated environmental compliance projects. Once the facilities achieve commercial operation, they are reflected in rate base as part of a general rate proceeding, and the surcharge terminates. MDU and Otter Tail Power, or OTP, are operating under separate transmission and environmental cost recovery riders. NSP is operating under a transmission cost recovery rider.
<b>Pennsylvania</b>	<b>Infrastructure projects</b>	State law allows the Pennsylvania PUC to approve automatic adjustment clauses to recognize, between general rate cases, utility investments in certain infrastructure projects. Distribution System Improvement Charges, or DSICs have been approved for CGP, PECO Energy's, or PECO's gas and electric operations, PPL Electric Utilities, or PPL-E, Peoples Natural Gas, Equitable Gas, UGI Central Penn Gas, UGI Penn Natural Gas, Metropolitan Edison, or MetEd, Pennsylvania Electric, or Penelec, Pennsylvania Power, or PPC and West Penn Power, or WPP.
<b>Pennsylvania</b>	<b>Infrastructure improvements</b>	Duquesne Light has filed for approval of a long-term infrastructure improvement plan. Duquesne proposes to accelerate the repair/replacement of aging infrastructure for the six-year period 1/1/17 to 12/31/22. Assuming the plan is approved, Duquesne would seek to reflect the related expenditures in rates through a DSIC.
<b>Rhode Island</b>	<b>Infrastructure improvements</b>	State law permits Narragansett Electric to submit, for PUC approval, annual infrastructure spending plans for its electric and gas operations, and recovery of expenses associated with an inspection and maintenance program and vegetation management program.
<b>Texas</b>	<b>Transmission</b>	For the service territories in which retail competition has been implemented, i.e., within ERCOT, transmission service providers are permitted to file up to twice annually, outside of a base rate case, to implement rate changes to reflect new transmission facilities through an interim transmission cost-of-service mechanism, or TCOS. TCOS mechanisms have been approved for TXC, TXN, CEHE, Oncor, and TNMP, as well as transmission-only entities such as Cross Texas Transmission, Electric Transmission Texas, Lone Star Transmission and Wind Energy Transmission of Texas.
<b>Texas</b>	<b>Transmission</b>	Utilities that have not implemented retail competition, i.e., EPE, ETI, SWEPCO and SWPS, may file once annually between rate cases for adjustments to reflect new investment in transmission facilities. This procedure is known as a transmission cost recovery factor, or TCRF, mechanism.

Source: Regulatory Research Associates. Adjustment Clauses, a State-by-State Overview. August 22, 2016.