

**Transmission Provider's Responses to  
Information Request #1 from the Association  
québécoise des consommateurs industriels  
d'électricité (AQCIE) and the Québec Forest  
Industry Council (QFIC)**

Translation commissioned by  
Association québécoise des consommateurs industriels d'électricité (AQCIE)  
and  
Québec Forest Industry Council (QFIC)

**TRANSMISSION PROVIDER'S RESPONSES TO INFORMATION REQUEST #1 FROM THE ASSOCIATION QUÉBÉCOISE DES CONSOMMATEURS INDUSTRIELS D'ÉLECTRICITÉ (AQCIE) AND THE QUÉBEC FOREST INDUSTRY COUNCIL (QFIC) REGARDING THE APPLICATION TO AMEND THE TRANSMISSION NETWORK UPGRADES POLICY (QUESTIONS FROM ROBERT D. KNECHT)**

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1. Reference HQT-2, Document 1, Table 1:

- a. Please confirm that, under HQT's proposed contribution policy, the maximum allowance is set such that the first year tariff revenues from the new load are sufficient to recover the first year utility revenue requirement for the maximum allowance. If you cannot confirm, please explain your response.

**R1.a**

**HQT's OATT specifies that the "maximum amount to be borne by the Transmission Provider is calculated from the present value over twenty (20) years of the point-to-point rate for an annual delivery specified in Schedule 9 herein, less 15% to account for the present value over twenty (20) years of operation and maintenance costs for Network Upgrades completed, as well as for the amount of the applicable capital tax and public utility tax."**

**HQT's proposed transmission upgrade policy is set such that all transmission charges collected from all of its transmission customers will be sufficient to cover the revenue requirement associated with HQT's transmission services.**

- b. Please confirm that, under HQT's proposed contribution policy, the tariff revenues from the new load will exceed the revenue requirement associated with the maximum allowance. If you cannot confirm, please explain your response.

**R1.b**

**This question is ambiguous. However, the tariff revenues from the new load will not exceed the revenue requirement.**

- c. In Ms. Chang's experience, is it reasonable to establish a customer contribution policy in which revenues from the new load exceed the revenue requirement for the maximum allowance level for most of the life of the assets?

**R1.c**

**See response to AQCIE-CIFQ Question no. 1(b).**

2. Reference HQT-1, Document 1, Section 3.1.2.2

- a. Please explain why it is appropriate to be conservative in specifying the period over which native load revenues will be received, such that a 20-year revenue period is applied to assets which will last for 40 years.

**R2.a**

**See responses to questions 2.1 to 2.3, Information Request #1 from the Régie, Exhibit HQT-4, Document 1.**

- b. Please identify any alternatives that native load has to service from HQT.

**R2.b**

**The Transmission Provider does not understand the question as formulated, and is not able to respond.**

3. Reference HQT-3, Document 1, Section 3.1(c):

- a. Please indicate whether the referenced 1.6 percent is O&M expense as a percentage of gross plant or net plant.

**R3.a**

**The 1.6 percent presented in Exhibit HQT-3, Document 1, is obtained by dividing the operating and maintenance costs of \$9.11/kW (\$380.2 million / 41,744 MW) by the maximum allowance for 2012 of \$571/kW.**

- b. Please provide a 10-year history of HQT O&M costs, peak kW system demands, total gross plant and total net plant.

**R3.b**

**See responses to questions 3.a) and 2.4 of Information Request #1 from the Régie, Exhibit HQT-4, Document 1.**

4. Reference HQT-3, Document 1, Section 4:

- a. Please specify the maximum allowance that HQT will make for point-to-point service under the following examples, and explain your response:
- i. 100 MW new point-to-point load with 100 MW new generation integration;
  - ii. 100 MW new point-to-point load with 150 MW new generation integration;
  - iii. 100 MW new load served from existing generating facilities;
  - iv. 100 MW new generation integration displacing generation from existing or closed facilities and no net new load.

**R4.a**

**The Transmission Provider will bear the costs, up to the maximum amount, of an upgrade initiated at the request of a point-to-point transmission service customer. The point-to-point customer is required to make a commitment of sufficient duration to ensure that the Transmission Provider can cover its costs.**

**The Transmission Provider will not assign any maximum amount if it can respond to the customer's service request without network upgrades.**

5. Reference HQT-2, Document 1, page 15, lines 6 to 7:

- a. Please explain why a maximum allowance is applied to the full capacity of a generating resource being added, when the generating resource can only increase HQT's revenue if there is an incremental load.

R5.a

Please refer to Table 6 of Ms. Chang's testimony (HQT-2, Document 1). In that table, Ms. Chang provides three different hypothetical scenarios and calculates the customer contributions required under each of them. As shown in Table 6 of Ms. Chang's testimony, the full capacity of the generating resource is used to determine, in the first step, the initial contribution (the minimum amount of contribution) required from HQD for the generating resource-related upgrades. This initial contribution (minimum amount of contribution) is calculated as the cost of the upgrade less maximum allowance (in \$/kW) multiplied by the full capacity of the generating resource. A further step is conducted to determine if additional contribution related to the generating resource project is warranted from HQD. In this step, the amount of credits available from other load-based HQD projects is calculated by comparing the aggregated load growth network upgrade costs to the maximum allowance available for these projects. If the credits are available (i.e., the aggregated load growth network upgrade costs are less than the maximum allowance), then such credits are applied to reduce the contribution related to the generating resource project. If no such credits are available (e.g., scenario 3), then HQD is required to contribute 100 percent of the upgrade costs associated with the generating resource.

In addition, using the full capacity of the generating resource to determine the maximum allowance is consistent with the method applied to point-to-point customers.

6. Reference HQT-2, Document 1, Table 6, Scenario 1:

- a. Is it correct that Scenario 1 envisions a 100 MW generation addition associated with a 400 MW load addition? Please explain any negative response.

R6.a

The 100 MW generation additions and the 400 MW load additions may or may not be directly linked. The hypothetical example illustrates that if HQD happen to add 100 MW of generation that induced transmission upgrades in the same year that 400 MW of load additions also induced transmission upgrades.

- b. Is it correct that Scenario 1 envisions a total investment cost of \$200 million and a customer contribution of \$40.2 million (before O&M markup)? Please explain any negative response.

R6.b

**Mathematically, this is correct.**

- c. Please explain why Scenario 1 requires any contribution at all, if total cost is \$200 million and the maximum allowance is \$239.1 million?

R6.c

Using Table 6, Scenario 1, the \$40.2 million (before O&M markup) (row [e]) is the

minimum contribution required from HQD for the generation resource-related upgrade. The remaining cost of the resource-related upgrade of \$59.8 million (\$100 million of total upgrade cost less \$40.2 million of minimum contribution, shown in row [f]) is rolled in with other costs because the credits that are available from the load growth-related upgrades (the \$139.1 million, shown in row [p]) exceed the \$59.8 million. From HQT's transmission upgrade policy perspective, the incremental costs associated with load growth excludes upgrade costs associated with generation resources, unless the generation resource-related upgrade costs are lower than the credits. This approach assures that only the transmission upgrade costs that can be recovered through transmission charges are rolled in with embedded system costs.

- d. Under Scenario 1, would the unused credit of \$80.1 million (\$139.1 million credit less the \$59.8 applied to resource integration) be available to offset other native load projects?

**R6.d**

**If those other native load projects occur in the same calendar year, it could be used to offset other native load project in the annual aggregation.**

7. Reference HQT-2, Document 1, Table 6, Scenario 3:

- a. Is it correct that Scenario 3 envisions a 100 MW generation addition associated with a 400 MW load addition? Please explain any negative response.

**R7.a**

**See response to AQCIE-CIFQ Question no. 6(a).**

- b. Is it correct that Scenario 3 envisions a total investment cost of \$400 million and a \$160.9 customer contribution (before O&M markup)? Please explain any negative response.

**R7.b**

**Mathematically, this is correct.**

- c. Can Scenario 3 be reasonably summarized as a project with a cost of \$400 million, a maximum credit of \$239.1 million, and a contribution equal to the difference? Please explain any negative response.

**R7.c**

**As stated in the response to AQCIE-CIFQ Question no. 6 (a), the resource-related and load-related projects are distinct projects that may or may not be directly associated with each other. The total contribution for the resource-related upgrade would be \$100 million (before O&M) (i.e., the full cost of the upgrade). This is determined as follows. Firstly, HQD is required to make a minimum contribution of \$40.2 (before O&M markup) (row [e]). Then, the cost of the upgrade above the minimum contribution (i.e., \$59.8 million in row [f]) is offset by any available credits from other HQD load growth-related upgrades. Since there were no credits available from other projects to help offset the \$59.8 million in Scenario 3, HQD is required to contribute the full cost of the resource-related upgrades of \$100 million (\$40.2**

million + \$59.8million). Additionally, the cost of the load-related upgrades (\$300 million in row [I]) exceeded the maximum allowance of \$239.1 million (row [o]) for these projects and thus, HQD is required to make a contribution of \$60.9 million (before O&M) for these load-related upgrades. Thus, in aggregate, HQD contributes \$160.9 (\$100 million for resource-related and \$60.9 million for load-related upgrades) in Scenario 3.

8. Reference HQT-2, Document 1, Table 1 and Table 8:

- a. Is it HQT's proposal that the levelized rolled-in cost value can be used to set the minimum revenue that must be earned from a new point-to-point load? Please explain any negative response.

**R8.a**

HQT is proposing to use an annual levelized cost approach to evaluate whether the revenues received from a point-to-point service customer are sufficient to recover the costs associated with the network upgrades associated with that point-to-point service. HQT is not proposing to set the revenues from point-to-point customers to equal the levelized rolled-in cost value.

- b. Based on the methodology presented in this chart, is it correct that a 100 MW investment with a cost of \$59.8 million (\$598 per kW) would have a levelized annual cost of \$6.036 million, or \$60.36 per kW? Please explain any negative response.

**R8.b**

Based on the Levelized Cost Calculation example in Table 8, an upgrade cost of \$59.8 million would have a levelized annual revenue requirement of \$6.036 million using the exact same assumptions used in Table 8. It is not clear from the question what the 100 MW is referring to. If that refers to a point-to-point transmission service of 100 MW, then the levelized revenue requirement associated with the upgrade over 20 years would be \$60.36/kW. Below is a table showing the calculations.

Table R8.b

**Levelized Costs Calculation Example**  
(\$ million)

<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>Inputs:</b>            [a] Cost of Capital      5.666%            [b] Levelization Years      20            [c] O&amp;M      15.00%            [d] Taxes      3.98%         </div>					
	Upgrade Cost Net of Contribution	O&M and Taxes	Total Rolled- in Upgrade Costs	Levelized Rolled-In Costs	Levelized Rolled-In Costs (\$/kW)
[1]	[2]	[3]	[4]	[5]	[6]
[e] Project A	\$59.80	\$11.35	\$71.15	\$6.036	\$60.36
Sources & Notes:					
[a] to [d], [2]: Assumed.					
[3] = [2] x ([c] + [d]).					
[4] = [2] + [3].					
[5]: Costs in [4] annualized over 20 years based on cost of capital provided in [a].					
[6] = [5] x 10.					

- c. Please explain why a charge of \$60.36 per kW is sufficient to justify an investment of \$598 per kW using the approach in Table 8, when a charge of \$74.65 per kW is necessary to justify an investment of \$598 per kW in Table 1.

**R8.c**

The levelized revenue requirement over the 20-year period is also \$60.34/kW. The small discrepancy is associated with using a rounded \$59.8 per kW rather than the exact figure presented in Table 1 of Ms. Chang's Testimony (HQT-2, Document 1). Below is a table showing the calculations of the levelized revenue requirement associated with Table 1.

Table R8.c

**Levelized Revenue Requirement Example  
(\$/kW)**

<b>Inputs:</b>		
[a]	Cost of Capital	5.666%
[b]	Levelization Years	20
	NPV of Revenue Requirement	Levelized Revenue Requirement
	[1]	[2]
		[3]
[c]	Project A	\$711.24
		\$60.34

Sources & Notes:

[a] to [b]: Table 1 of Ms. Chang's Testimony.

[2] = NPV of the yearly Revenue Requirement in Table 1 of Ms. Chang's Testimony.

[3]: Costs in [2] annualized over 20 years based on cost of capital provided in [a].

9. Reference HQT-2, Document 1, Table A1:

- a. Please explain why the existing methodology applies a maximum allowance credit to the resource related project which does not generate any revenue for HQT. Does the existing method double count credits when applied to both the new resource and the new load?

**R9.a**

**The proposed methodology by pooling HQD's resource-related and load growth-related projects, limits the application of the maximum allowance to the forecast of the load growth.**

- b. Can the proposed approach be reasonably summarized as having a cost of \$240 million, a net addition of revenue-generating load of 300 MW, a maximum allowance amount of \$179.4 million, and a contribution requirement (before O&M markup) equal to the \$60.6 million difference? Please explain any negative response.

**R9.b**

**As stated in the response to AQCIE/CIFQ Question no. 6 (a), the resource-related and load-related projects are distinct projects which may or may not be directly associated with each other. In Table A1, the total contribution for the resource-**



related upgrade would be \$60.7 million (before O&M) (i.e., the initial contribution plus the remaining leftover rolled-in portion not covered by credits). This is determined as follows. Firstly, HQD is required to make a minimum contribution of \$40.2 (before O&M markup) (col [5]). Then, the cost of the upgrade above the minimum contribution (i.e., \$59.8 million in col [4]) is offset by any available credits from other HQD load growth-related upgrades (col [5]). Since there were \$39.3 million of credits available from other projects, this helps offset a portion of the \$59.8 million of rolled-in costs from the resource-related project. HQD is thus required to contribute the combination of \$40.2 million of initial contribution plus an additional \$20.5 million for a total contribution of \$60.7 million.

10. Reference HQT-1, Document 1, Section 3.1.2.1, and HQT-1, Document 1, Section 3.9.1:

- a. In evaluating the Distributor's contribution, please explain how load growth over a 20 year period is reflected in the calculation. For example, if the incremental load served by the project is 10 MW in the first year and grows to 200 MW by the end of the 20-year period, to what MW load value is the \$598 per kW maximum investment applied? Please explain your response and provide an illustrative quantitative example.

**R10.a**

As set out in HQT's OATT, the maximum amount for network upgrades is calculated by multiplying the maximum allowance in effect by the maximum capacity to be transmitted. In the case of network upgrades to integrate new load, the Transmission Provider explained, in Table 2 of Exhibit HQT-3, Document 1, that for satellite substation loads, the maximum capacity to be transmitted equals the lesser of:

- Forecast load growth over 20 years;
- Additional capacity generated by the project.

If the project cost exceeds the maximum amount, the contribution will equal the difference between the total project cost and this maximum amount.

**Example:**

**Forecast load over 20 years: 200 MW**

**Project cost: \$125 million**

**Maximum allowance: \$598/kW**

**Maximum amount: 200 MW x \$598/kW = \$119.6 million**

**Contribution: \$125M – \$119.6 million = \$5.4 million**

11. Reference HQT-1, Document 1, Section 3.1.2:

- a. Under the proposed policy, please explain whether a maximum allowance amount would be applied to new generation assets that replace existing generation assets that are shut down.

**R11.a**

For network upgrades to connect generating stations to supply native load, the Transmission Provider's proposal in the application is based on the premise that it does not derive any revenues from resources connected to meet Distributor needs. The Transmission Provider therefore does not assign any MW to the Distributor's resource projects when it adds them to the annual aggregation. The costs added to the aggregation may be covered by satellite substation growth and, where applicable, growth of Distributor customers directly connected to the transmission system. Moreover, the Transmission Provider notes that the new resources that the Distributor asks the Transmission Provider to integrate within the system are not identified as having to replace resources withdrawn from the system.

Additionally, where the Transmission Provider makes an investment with the sole objective of ensuring the durability of existing equipment, it will be treated under regulatory provisions for such investments, and not under the network upgrades policy, which deals with network upgrades designed to respond to customer requests.

12. Reference HQT-1, Document 1, Table 1 and Appendix 1:

- a. Please explain why a customer contribution is required for capital investments which involve zero load growth in some of the years shown.

**R12.a**

As mentioned in section 3.3 of Exhibit HQT-1, Document 1, revised, no growth MWs are factored into the maximum allowance calculation for network upgrades involving facilities upstream of satellite stations, except for projects to connect Distributor customers directly to the transmission system.

13. Reference HQT-1, Document 1, Section 3.1.2.2:

- a. Please provide all supporting calculations for the \$521.6 million value in MS Excel electronic format with formulae intact.

**R13.a**

As mentioned in the responses to questions 6.2 and 7.1 of Information Request #1 from the Régie, Exhibit HQT-4, Document 1, the Transmission Provider filed a revised version of appendix 1 of Exhibit HQT-1, Document 1.

With respect to the maximum allowance used, please see the response to question 11.1 from ACEFO and the following information:

For the load growth, the aggregation pertains to the determinations of the contribution required from the Distributor, which were filed with the rate applications addressed in the Régie's decisions. For satellite substation projects, the Transmission Provider applies the maximum allowance in effect in the year of commissioning, which is the year in which the project is included in the aggregation. The Transmission Provider also notes that for the projects done to

supply load for Distributor customers connected directly to the system, it applies the maximum allowance in effect when the internal connection agreement is executed with the Distributor. If load for a Distributor customer is requested for a period of less than 20 years, the Transmission Provider applies an allowance lower than the maximum allowance, as set out in section E of Attachment J to HQT's OATT.

With respect to the integration of wind farms within the transmission system, the portion of costs of projects that may be included in the project aggregation, and which thus may potentially be covered by the maximum amounts for satellite substations and customers connected directly to the system, is determined based on the maximum allowance that was in effect in HQT's OATT as of the date of execution of the administrative agreement with the Distributor, as the Régie wishes.

The Transmission Provider established the project aggregation for the Distributor (load and resource projects) in Appendix 1 of Exhibit HQT-1, Document 1, revised, on this basis.

- b. Is HQT proposing that HQD make an additional \$521.6 million contribution? Please explain fully, including the details of when such a contribution would be required under HQT's proposal.

**R13.b**

The Transmission Provider's proposal involves a \$444.1 million contribution from the Distributor, plus operating and maintenance costs. This amount is the result of the inclusion of resource project upgrades to integrate wind farms in the load project aggregation for 2006 to 2014. If the Régie approves this proposal, the Transmission Provider intends to incorporate this method at the next rate application following the Régie's final decision on this application, if the period between the decision and the filing of the rate application allows.

**14. Reference HQT-1, Document 1, Section 3.3:**

- a. Please explain generally how the incremental cost for native load growth is calculated, and identify the specific types of system enhancements and reinforcements included in the incremental cost that is associated with the load growth.

**R14.a**

The costs of network upgrades to meet native load growth are the costs of the best solutions identified to meet this growth. As for the types of network upgrades included in the solutions, they vary depending on need and the capacity of the system where the need is located, and can range from a transformer upgrade in a satellite substation to a major reinforcement of the system upstream of the satellite substations.

As noted in Exhibit HQT-1, Document 1, pp. 18-19, the Transmission Provider aggregates all the projects commissioned during the year for the purpose of calculating the Distributor's annual contribution but does not assign any growth

**MWs to projects upstream of the satellite substations in the annual aggregation, except for load growth for customers of the Distributor that are connected directly to the transmission system. The maximum allowance is therefore limited to forecasted growth in satellite substations and customers connected directly to the transmission system.**

15. Reference HQT-1, Document 1, Section 3.5:

- a. Please provide an illustrative quantitative example showing how the Distributor's indemnity would be calculated and paid under HQT's proposal.

**R15.a**

**The Transmission Provider presents the following example:**

- **Connected load: 100 MW**
- **Project cost: \$70 million**
- **Maximum allowance: \$598/kW for 20 years**
- **Maximum amount associated with the project: 100 MW x \$598/kW = \$59.8 million**

**If the customer discontinues production after 8 years, the Distributor should pay an indemnity of: \$59.8 million x 12 years / 20 years = \$35.9 million.**

- b. Is HQT proposing a similar indemnity from point-to-point customers in the event of default by a point-to-point customer? Please explain your response.

**R15.b**

**As part of this application, the Transmission Provider is following up on a question from the Régie concerning the individual risks of certain projects to connect the Distributor's industrial customers.**

16. Reference HQT-1, Document 1, Section 3.6:

- a. If, hypothetically, an existing large industrial customer were to request that HQT construct, own and operate a new sub-station, please explain how HQT would recover the costs for the investment.

**R16.a**

**As mentioned in section 3.6 of Exhibit HQT-1, Document 1, revised, all industrial customers connected directly to the transmission system have their own step-down substations.**

**With respect to its substations, the Transmission Provider notes that the requests it received from the Distributor to connect industrial load to the transmission system do not assume that upgrades to the system are required. It is the Transmission Provider who identifies the upgrades that will be required to transmit the load. If the upgrade includes construction of a new substation, it will be handled by the Transmission Provider like any other type of network upgrade for cost coverage purposes, i.e., in accordance with section C of Attachment J to HQT's OATT.**

17. Reference HQT-1, Document 1, Section 3.7:

- a. Please explain how HQT determines the amount by which each project reduces the overall cost of a project.

**R17.a**

**Network upgrade costs are shared among transmission service customers when upgrades are triggered by concomitant requests from different customers and the Transmission Provider decides to combine their respective needs and identify a comprehensive technical solution that meets the previously identified needs, in full, advantageously and simultaneously.**

**The Transmission Provider first develops and compares the various scenarios for identifying optimal solutions that will individually meet the needs of each of these customers, in the order in which their requests were made. The Transmission Provider studies each of these requests, taking requests already submitted into account, and determines a technical solution for each request. If the Transmission Provider identifies and selects a comprehensive technical solution, it assigns a common objective to the customers whose needs are met by the solution.**

**The Transmission Provider assigns to these customers a portion of the costs of the comprehensive technical solution based on the chronological sequence of their requests, to a maximum of the amount of the technical solution developed for them initially, and up to the full value of the common objective assigned to them.**

- b. Please provide a representative quantitative example of the cost sharing policy.

**R17.b**

**For the Saint-Césaire – Bedford project (Docket R-3819-2012), the Transmission Provider shared capital expenditures in the “customer demand growth” category between two customers. In Exhibit HQT-1, Document 1 of Docket R-3819-2012, page 24, the Transmission Provider explains how this was done.**

*“The capital expenditures required to secure native load supply are assessed at \$25.3 million and reflect the cost of a synchronous condenser. However, with the solution proposed for the Project, native load supply can be secured and the long-term point-to-point transmission service requested can be provided. The capital expenditures required to provide this point-to-point service to the HQT-Highgate interconnection are assessed at \$60.8 million.”*

**Also in the same docket, in response to commitment 7, Exhibit HQT-2, Document 2, the Transmission Provider explains the method used to determine the costs of the project to meet native load growth needs (Distributor’s contribution).**

*“To establish the costs of the project to meet native growth needs, the Transmission Provider determined the equipment upgrade required to respect*

*transmission system design criteria, taking only native load into account. Accordingly, the capacity transmitted on the HQT-Highgate interconnection was set at zero.*

*The Transmission Provider's analyses showed the impossibility of using large numbers of shunt capacitors on this system and justified the use of a 72 MVAR synchronous condenser to meet the design criteria. The cost of this solution was determined by looking at a similar project that involved upgrading synchronous condensers at the Copper Mountain substation at a planned cost of \$25.3 million."*

18. Reference HQT-1, Document 1, Section 3.8:

- a. Please provide a representative quantitative calculation for deriving the revenue commitments in a Toulnostouc-type arrangement. Please specify all supporting assumptions, and indicate whether the maximum investment amount is used in the calculation.

**R18.a**

**As indicated in Exhibit HQT-1, Document 1, revised, pages 27, 28 and appendix 2, the Transmission Provider reiterates that its proposal under this application concerns the follow up on commitments under section 12A.2 i) and Attachment J of HQT's OATT. It plans to follow up on these commitments on an annual basis, as explained in Exhibit HQT-1, Document 1, revised, pages 27 and 28 and appendix 2.**

**For Toulnostouc-type commitments, the Régie previously decided on the format for follow up on these commitments, and also stated it was satisfied with the follow up on commitments pursuant to section 12A.2 ii) of HQT's OATT. The Transmission Provider has therefore been following up on these commitments in its annual report<sup>1</sup> for several years. This application does not aim to amend the follow up on Toulnostouc-type commitments and on commitments under section 12A.2 ii) of HQT's OATT.**

- b. Please provide a representative quantitative calculation for deriving the revenue commitments in the paragraph 12A.2(i) method. Please specify all supporting assumptions, and indicate whether the maximum investment amount is used in the calculation.

**R18.b**

**See appendix 2 of Exhibit HQT-1, Document 1, revised.**

- c. Please provide a representative quantitative calculation for deriving the revenue commitments in the paragraph 12A.2(ii) method. Please specify all supporting assumptions, and indicate whether the maximum investment amount is used in the calculation.

**R18.c**

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<sup>1</sup> Transmission Provider's 2012 Annual Report, HQT-2, Document 14.

**See the response to question 18.a.**

- d. For each of the examples presented in sections (a) through (c) of this interrogatory, please provide a quantitative demonstration of how the calculation would change under the proposed policy.

**R18.d**

**A comparison of the current format for follow-up on commitments and the proposed format is presented in Exhibit HQT-3, Document 1, page 27.**

**See also the response to question 18.a.**

19. Reference HQT-1, Document 1, section 3.9.3:

- a. Under the proposed contribution policy, will HQT make a contribution toward new generator switchyards that are not related to new load? Please explain your response.

**R19.a**

**See the response to question 15.3, Information Request #1 from the Régie, Exhibit HQT-4, Document 1.**

- b. Is HQT proposing to assume responsibility for refurbishing switchyards that are owned and operated by private generators and/or HQP? Please explain your response.

**R19.b**

**See the response to question 19.a).**

- c. If your response to part (b) is in any way affirmative, please explain why HQT has not proposed to require generators to uniformly assume cost responsibility for switchyard refurbishment.

**R19.c**

**See the response to question 19.a).**

20. Reference HQT-3, Document 1, Section 7.2(c):

- a. In the case of separating costs between load growth and service quality, please explain why the cost for service quality is calculated as the residual value, rather than calculating the load growth component as the residual value.

**R20.a**

**See the response to question 14.5, Information Request #1 from the Régie, Exhibit HQT-4, Document 1.**

- b. Please provide a representative quantitative example showing how costs are attributed among the three factors, showing how standalone costs for each individual factor and incremental costs for each individual factor and each pair of factors is used in the calculation.

**R20.b**

**See the response to 14.6, Information Request #1 from the Régie, Exhibit HQT-4, Document 1.**

21. Reference HQT-3, Document 1, Section 7.3:

- a. Please explain why it is not possible or reasonable to require future beneficiaries of current period investments, funded in part by current period customer contributions, to contribute to the cost of the upgrade when they obtain the benefit therefrom.

**R21.a**

**As indicated in Exhibit HQT-3, Document 1, pages 24 and 25, some network upgrades provide direct or indirect benefits to existing or future users other than the requester that triggered the expenditure. It is however reasonable to think that those users would be inclined to challenge any attempt to make them pay a share of the cost of upgrades that are not required for their own transmission or generating station connection needs, on the grounds that they were not involved in the decision to make such network upgrades.**

**Thus, where transmission capacity is available, the Transmission Provider would not reasonably allocate a portion of the cost of upgrades triggered by a previous request, on the basis that a requester today benefits from a transmission service with no network upgrade.**

**Even if a requester agreed to pay a higher cost for the benefit it is receiving today, the Transmission Provider should be able to identify which past upgrades are the reason for this available capacity and make the appropriate assumptions for bringing the cost incurred to a present value.**

- b. Will the proposed policy of requiring the party requesting an upgrade to bear the entire cost of the upgrade (above the maximum allowance) result in sub-optimal system expansions, in that some relatively low cost system expansions will not be undertaken because the capacity is not directly needed by the specific party requesting the service.

**R21.b**

**The Transmission Provider states that its proposal does not question the principle by which the requester that triggers the network upgrade must bear the costs of its request, under the “first-come, first-served” principle used for waiting lists. In any event, the full costs are allocated to the customer that triggered the need for the network upgrade, in accordance with customary utility practice.**

**This practice, combined with application of the maximum capital expenditure that can be covered by the Transmission Provider, is consistent with the two fundamental principles of user pays and non-discriminatory access.**

**The allocation of network upgrade costs in no way influences the transmission system expansion planning process.**