QUÉBEC **RÉGIE DE L'ÉNERGIE**

NO: R-3888-2014

APPLICATION TO AMEND THE TRANSMISSION SYSTEM UPGRADES POLICY

HYDRO-QUÉBEC
(hereinafter, the "Transmission Provider").

Complainant

and

ASSOCIATION QUÉBÉCOISE DES CONSOMMATEURS INDUSTRIELS D'ÉLECTRICITÉ
(hereinafter "AQCIE")

and

QUÉBEC FOREST INDUSTRY COUNCIL
(hereinafter "QFIC")

Intervenors

BRIEF BY AQCIE AND QFIC

On April 30, 2014, the Transmission Provider filed an application regarding the Transmission System Upgrades Policy. On May 21, 2014, the Régie rendered a procedural decision ordering a public hearing and setting a schedule for the file. Pursuant to this decision, on June 6, 2014, AQCIE and QFIC filed an application to intervene indicating their intention to address the upgrade policy generally by insuring the principles of economic efficiency were respected. The Régie subsequently rendered a procedural decision on July 11, 2014 dealing with the applications to intervene, procedural handling of the file, and the topics to be addressed. The Régie granted stakeholder status to 6 entities, including AQCIE and QFIC. The Régie also decided to study the file in two phases. The first phase involves an examination of the various issues listed below; the second phase will deal with changes to the wording of the Transmission Provider's Transmission Tariff. The topics under review for phase 1 proposed by the Transmission Provider are defined below:

- Application of the Transmission Provider's maximum allowance in the case of upgrades;
- Network upgrades to connect generating stations to serve the native load;
- Network upgrades for native load growth upgrades upstream of satellite substations;
- Methodology for establishment and payment of the Distributor's contribution for projects with phased commissioning;
- Specific risks associated with certain projects;
- Applicable credits when the customer has its own step-down substation;
- Approach to cost-sharing among transmission service customers;
- Follow-up on commitments;
- Rate impact calculation methods;
- Special arrangements for some projects, such as the integration of new renewable energy sources;
- Methodology for the refurbishing or replacement of existing generating station switchyards.

Subsequent to the review of the evidence filed by the Transmission Provider, the Régie asked it to expand on some elements of evidence, and provide additional evidence on the new topics described below:

- Guiding principles;

- Maximum allowance calculation methodology;

- Application of the Transmission Provider's maximum allowance for point-to-point service.

AQCIE and QFIC will make comments on some of the above-listed elements so as to ensure that the upgrades policy is designed so as to maintain compliance with the principle of rate neutrality and cost causation, as well as non-discriminatory treatment for all of the Transmission Provider's customers. More specifically, our brief will deal with the guiding principles of the upgrades policy, the Transmission Provider's proposal on handling network upgrades for the distributor, the Transmission Provider's proposal on network upgrades for point-to-point service customers and, lastly, network planning in the context of the upgrades policy.

1. GUIDING PRINCIPLES

Before assessing the merits of the Transmission Provider's proposed amendments to the upgrades policy, we will review the guiding principles of the policy now in effect.

The Régie authorized the application of a maximum allowance to be incorporated into the rate base in decision D-2002-95. The Régie extended application of the maximum allowance to upgrades for the native load, in order to treat all of the customers the same. The methodology for applying the allowances is defined in section E of Attachment J of the Transmission Tariff. Enshrined by the Régie in prior decisions, these provisions follow, according to the Transmission Provider,[1] three guiding principles that stem from decision D-2002-95, that is:

- avoiding excessive costs for network upgrades requested by a customer, thereby protecting existing customers;

- covering the costs of upgrades done for a customer;

- ensuring equitable treatment and non-discriminatory access to the transmission

[1] Exhibit B-0011, page 5, lines 14 to 20.

system for all of the Transmission Provider's customers.

These three guiding principles are intended to ensure **rate neutrality for network upgrades**. The Régie made this objective official in decision D-2002-95. The Régie re-affirmed it nine years later in decision D-2011-039 (Transmission Provider Rate Case R-3738-2010). In that decision, with respect to the connection to be made between the upgrades policy and the principle of rate neutrality, the Régie interpreted decision D-2002-95 as follows:

> [403] For investments pertaining to native load growth needs, the Régie chose to apply the concept of rate neutrality, neutrality provided for by the Distributor's contribution to investment costs, so that the transmission rate, a uniform rate for all transmission service users, would not go up. (emphasis added)

In rate case R-3738-2010, the Transmission Provider asked the Régie to amend the upgrades policy to no longer require a contribution from the Distributor for any upgrade associated with native load growth. The Régie rejected the request on the grounds that it would breach the principle of rate neutrality, which would have a negative impact on customers other than native load customers (point-to-point customers and network integration customers). Here, the Régie noted[2]:

> [405] In this rate case, the Transmission Provider proposes to no longer consider the concept of rate neutrality and thus to no longer require a Distributor contribution for upgrades.

> [406] Independent of the change's rate impact, an impact that is, moreover, not clearly established in the evidence, this has to be construed as an important change in approach. Henceforth, if the Régie accepted the Transmission Provider's proposal, all transmission network users, including point-to-point service customers, would bear all of the cost of upgrades. (emphasis added)

The Régie also raised the fact that the upgrades policy approved in decision D-2002-095 is part of a coherent whole that must not be altered without changing the other parameters, parameters which include the rate structure:

> [429], Moreover, the Régie is of the opinion that the rate provisions set out in the Transmission Provider's upgrades policy and other provisions of the

[2] D-2011-039

> Transmission Tariff, approved in decision D- 2002-95, are part of a coherent whole. In the event that adapting this policy to a given context would be justified, the Régie is of the opinion that such a change should not be limited to amending one component without assessing the impact of the change on the coherence of all rate provisions in effect. The evidence in this area submitted by the Transmission Provider is not convincing.
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> [430] **For the above grounds, the Régie dismisses the application for amendment of the upgrades policy submitted by the Transmission Provide**r. (emphasis added)

To grasp the importance of the principle of rate neutrality in the Transmission Provider's Transmission Tariff structure, it is important to return to the grounds raised by the Régie in prior decisions to justify the upgrades policy now in effect. In fact, in decision D-2011-039, the Régie further clarified its desire, expressed in decision D-2002-095, to factor in the specific context of the upgrades policy for Quebec.

> [415] This technical question is, however, at the heart of the principle upheld by the Régie in 2002 that the rate for all customers of the transmission service should not rise as a result of upgrades done for any of the user categories, whether that be the Distributor for the native load transmission service or point-to-point customers.
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> [416] It is clear that, in 2002, in establishing a maximum allowance amount for the costs of certain network upgrades and agreeing to allow the Transmission Provider to pay for the entire cost of certain other upgrades, the Régie did not consider that every network upgrade benefited all customers of transmission services.
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> [417] The Transmission Provider argues that the concept of rate neutrality applied to upgrades does not appear elsewhere in North America.
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> [418] This argument is not determinant, given the specifics of Quebec, where rates are uniform across the territory and the definition of “transmission network” is specific.
>
> *(…)*
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> [426] The Transmission Provider argues that transmission rates must

> reflect the fair value of its assets. In 2002, the Régie specifically considered it fair, in a context in which a single unit rate applied to native load service and point-to-point customers, to adopt, through a customer contribution, a measure to prevent the Transmission Provider from reflecting, in the single rate, all costs associated with serving the native load and vice versa. This Transmission Provider argument therefore does nothing to settle the questions associated with the concept of rate neutrality.
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> [427] Here, and as set out above, EBM argues that, if the avenue proposed by the Transmission Provider were to be contemplated, there would be reason to revise the concept of a single rate for native load service and point-to-point service.

As the Régie noted, applying a single rate for all customer categories stems from the specifics of the definition of "transmission network" in the Act respecting the Régie de l'énergie:

> "Electric power transmission system": means a network of installations for the transmission of electric power, including step-up transformers located at production sites, transmission lines at voltages of 44 kV or higher, transmission and transformation substations and any other connecting installation between production sites and the distribution system; (emphasis added)

As a reading of the above passages shows, the principle of rate neutrality arises from Quebec's specific features. It is in this context that the Régie has repeatedly decided to maintain the principle of rate neutrality so as to ensure that all of the Transmission Provider's customers (native load customers, network integration customers and point-to-point customers) are treated fairly and without discrimination, throughout Quebec. The principle of equity among the Transmission Provider's customer categories also applies over time. The Transmission Provider's upgrades policy and establishment of the allowance must not be designed to favour future customers. In fact, it would be unfair for the Transmission Provider's existing customers to not be able to benefit from contemporary revenue that, according to the Transmission Provider's proposal, could be used to pay for future upgrades. Integenerational equity is also among the founding principles of the upgrades principle approved by the Régie in decision D-2002-095.

The concept of discrimination is especially important in the context in which Hydro-Québec has pledged to offer non-discriminatory access to its network to U.S. authorities (FERC). It is in this context that the Régie must make sure that the upgrades policy defined in the text of the Transmission Provider's Transmission Tariff provides non-discriminatory access to any customer that wants to use the Hydro-Québec transmission network, Hydro-Québec having a monopoly in this arena. This is especially important as the Transmission Provider's biggest point-to-point customer is its affiliate, Hydro-Québec Production. This facet is not only important for point-to-point service customers, but also for native load customers. In fact, customers of Hydro-Québec Distribution must be able to rely on the largest possible number of providers to meet the post-heritage needs of the native load which, according to the law, must be met by an open call for tenders process.

AQCIE and QFIC ask the Régie to clearly restate the principles of rate neutrality and intergenerational equity in the wording of the Transmission Provider's upgrades policy.

2. NETWORK UPGRADES FOR THE DISTRIBUTOR

Current application of the upgrades policy for the Distributor

The current upgrades policy to meet the Distributor's needs entitles the Distributor to the Transmission Provider's maximum contribution for any investment associated with forecast 20-year growth in satellite substations and customer installations connected directly to the transmission system. Every year, the Transmission Provider updates the Distributor's contribution for native load projects. In addition to load projects, resource integration projects and projects to connect the Distributor's substations are incorporated into the Transmission Provider's rate base up to the maximum allowance, based on the maximum capacity to be transmitted over the network. This practice discriminates toward other Transmission Provider customers as they must bear the costs of network investments made to handle the native load which do not yield new revenue. In fact, the Distributor's new resources do not generate new revenue, as all of the Distributor's revenue is drawn from investments in substations and equipment used to supply customers that are directly connected to the Transmission Provider's network. This practice results in giving the Distributor a double allowance for transmission of the same MW. In fact, in this context, the MWs produced by a wind farm contracted to the Distributor are necessarily used by a substation or a customer that is directly connected to the network.

In addition to providing the double allowance, the Transmission Provider ends up factoring in the equipment required to integrate variable production with a utilization factor below 100%. For example, take wind energy, for which the NPCC recognizes a utilization factor of 30%. In fact, the transmission capacity of the network to incorporate 100% of wind energy is not equal to the capacity of the substations to absorb it and the equipment needed to power customers that are directly connected to the network. This is because the fluctuation in wind energy production is offset by variations in output at other generating stations (wind energy integration agreement) or potentially by greater user of interconnection.

For these reasons, we believe that the application of the current upgrades policy for investments relating to the Distributor's needs does not respect the principle of rate neutrality, to the detriment of the Transmission Provider's other customer categories.

Proposed methodology for assessing the Distributor's contribution

The Transmission Provider proposes to substantially change its upgrades policy with respect to the investments required to meet native load needs. It proposes integrating the Distributor's resource projects with the project aggregation used for the annual calculation of the Distributor's contribution pertaining to 20-year growth of the substations and customer installations that are directly connected to the transmission network. This proposal responds to the concerns mentioned in the previous section. Aggregation eliminates the double application of the maximum allowance for the Distributor's investment projects and also deals with the issues associated with integrating variable energy generating stations. Aggregation limits the Transmission Provider's total investment costs for forecast 20-year growth generating incremental revenue, thus respecting the principle of rate neutrality.

AQCIE and QFIC support the Transmission Provider's proposal to include resource project investments with native load growth investments, as it complies with the principle of rate neutrality.

As stated in its evidence, the Transmission Provider is applying the aggregation measure retroactively to 2006. 2006 was the first year in which the Régie reserved its decision on the estimation of the Distributor's contributions for such investment projects. The retroactive assessment allows the Transmission Provider to factor in incremental revenue from the conversion capacity of all substations and equipment used by customers directly connected to the network that have benefited from upgrades since 2006. That being said, it would have been better to consider all substation surplus conversion capacity including substations in which no investment has been made since 2006. By excluding all the conversion capacity available to supply the native load, the Transmission Provider underestimates the incremental revenue from the Distributor in establishing its contribution to investment projects.

AQCIE and QFIC recommend that the Régie ensure that the Transmission Provider considers all network conversion capacity, including the capacity from

installations in which no investment has been made since 2006, so that the Transmission Provider correctly estimates the incremental revenue in establishing the Distributor's contribution.

The Transmission Provider also proposes to retain the maximum 20-year period for establishing the maximum allowance. However, the evidence showed that the equipment required to deliver service to meet the Distributor's needs had a lifespan of 40 years. Moreover, in response to a question from the Régie,[3] the Transmission Provider stated:

> For example, a 40-year period could be appealing in some circumstances, particularly for native load, which is expected to be present for a long time, or for a point-to-point transmission customer that wants to sign long-term transmission agreements (more than 20 years).

In our opinion, the Transmission Provider's maximum allowance for network upgrades should be established based on the average useful life of the assets. This would allow the Distributor to more precisely align its contributions with the revenues it would provide to the Transmission Provider. We think that the estimate of revenue for calculating customers' contribution must not be conservative, but rather fair and equitable.

AQCIE and QFIC recommend that the Transmission Provider's maximum allowance calculation be based on a 40-year period.

Moreover, the Transmission Provider proposes to carry forward positive balances from the annual aggregation of the Distributor's projects to cover future contributions, if applicable. Carrying these amounts forward does not abide by the principle of rate neutrality, as it deprives existing customers of the rate base to which they would normally be entitled. The proposal contravenes the principle of intergenerational equity, as existing customers cannot benefit from contemporary surplus revenue, which would have the corollary of unduly favouring future customers.

To abide by the principles of rate neutrality and intergenerational equity, AQCIE and QFIC recommend to the Régie that the exercise of establishing the Distributor's contributions be done annually without factoring in prior-year surpluses. This way, the potential surpluses could be incorporated into the rate base each year and benefit current customers, which could enjoy a rate decrease.

[3] Exhibit B-0015, page 8, R2.2, lines 24 to 30.

3. NETWORK UPGRADES FOR POINT-TO-POINT CUSTOMERS

<u>Current application of the upgrades policy for point-to-point customers</u>

The allowance the Transmission Provider grants to a point-to-point customer for transmission network upgrades is based on the term of the transmission service agreement. As with the Distributor, the allowance is established for a maximum of 20 years or for the term of the service agreement; the point-to-point customer must, if applicable, pay a contribution if the cost of its network upgrades are higher than the allowance.

Point-to-point customers can also cover the cost of network upgrades for connecting generating stations, through the obligation to make one of the commitments set up in section 12A.2 of the Transmission Tariff:

> 12A.2 Purchase of point-to-point service or repayment: When the Connection Agreement is executed, the provisions herein for connecting the generating station to the power system, particularly those set out in Attachment J, shall apply. Furthermore, the generating station owner or a third party named for that purpose by the owner shall, to the satisfaction of the Transmission Provider, make at least one of the commitments below:
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> i) Long-Term Transmission Service Agreement:
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>> At least one Service Agreement must be executed for Long-Term Firm Transmission Service. The present value of payments to be made to the Transmission Provider over the term of the applicable service agreements at least equals costs incurred by the Transmission Provider to ensure connection of the generating station, less any amount repaid to the Transmission Provider;
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> ii) Transmission Service Purchase Commitment:
>
>> A take-or-pay commitment to purchase Firm or Non-Firm Point-to-Point Transmission Services must be executed for an amount that at least equals the present value of costs incurred by the Transmission Provider, less any amount repaid to the Transmission Provider, to ensure connection of the generating station. Subject to the following paragraph, at the end of each twelve-(12-) month period following

December 31 of the year the generating station is commissioned, the annual amount of the purchase commitment (value A) is subtracted from the product of the annual output to the power system measured at the connection point and the rate for Point-to-Point Transmission Service contracted by the customer or, lacking any, the rate for non-firm hourly service (value B). Any negative difference between these two (2) annual values (B-A) is paid to the Transmission Provider at the end of the year in which it occurs. The amount payable by the customer is reduced by any cumulative positive difference (B-A) from prior years. If the cumulative difference (B-A) is larger than the amount payable, the net amount payable is zero and the balance of the cumulative difference (B-A) is carried over for application in subsequent years. If the difference between these two (2) annual values (B-A) is positive and the cumulative difference (B-A) from prior years is negative, the Transmission Provider pays the customer a refund equal to the lesser of the positive difference between the annual values (B-A) and the absolute value of the cumulative difference (B-A) from prior years. During the year that the generating station is commissioned, the annual purchase commitment is prorated to the number of days between the commissioning date and December 31 of that year. The annual purchase commitment, i.e., value A above, is an annuity calculated on the basis of the following factors: a) the costs incurred by the Transmission Provider to ensure connection of the generating station augmented by 15% to cover operating and maintenance costs over a twenty- (20-) year period, augmented by applicable taxes, less any amount repaid by the customer; b) the Transmission Provider's prospective capital costs approved by the Régie; and c) the term of the purchase commitment; and

iii) Repayment:

A repayment that equals the present value of the costs incurred by the Transmission Provider to ensure connection of the generating station. The generating station owner shall not be required to provide any of the above commitments for any generation obtained by the Distributor through a call for tenders or when such a call for tenders is waived and which the Distributor has designated pursuant to Section 38 herein. When only a portion of a generating station is for the Distributor, the commitment of the generating station owner, or of the third party named for that purpose by the owner, shall cover an amount equal to the costs incurred by the Transmission Provider to ensure connection of the generating station, multiplied by the following factor: the number one (1), less

> the ratio of the capacity in kilowatts (kW) allocated to the Distributor to the total rated capacity in kW of the station's generating units. In the event of abandonment before the generating station is commissioned, the requestor shall repay the total of costs incurred by the Transmission Provider.

<u>Proposed amendments for the treatment of the upgrades policy for point-to-point customers.</u>

The Transmission Provider is proposing annual follow-up on the commitments of point-to-point customers to demonstrate that the costs it incurs for network upgrades or to connect generating stations are covered by the revenues from the service agreements of point-to-point customers. This proposal has some points of similarity with the proposal for upgrades associated with the Distributor's needs. The proposal involves linking, for each point-to-point customer, all investments in the transmission system specific to that customer (generating station connection, interconnection, etc.) to all of that customer's existing or new commitments. The Régie has repeatedly questioned the advisability of using the surplus current value of a project as revenue that could be used for other projects. In decision D-2009-071 (file R-3669-2008), the Régie noted:

> [32] With respect to the Transmission Provider's proposal, <u>the Régie questions</u> the relevance of capitalizing revenue from the HQT-ON path over 50 years, a much longer period than considered in the rate neutrality test, which is established over 20 years. <u>The same applies to the Transmission Provider's proposal to use the surplus current value from a project as revenue that can be associated with other projects.</u>
>
> [33] <u>These two examples are not provided for in the wording of the Transmission Tariff and raise major issues with regard to rates.</u> According to the Régie, such avenues must be subject to review in the context of a rate case and be approved by the Régie, in order to be codified, if applicable, in the Transmission Tariff.
>
> [34] According to the Régie, annual flows from each customer commitment and the associated annual revenue flows from each point-to-point service reservation should be accounted for separately for the purposes of follow-up on commitments made when point-to-point service is requested under section 12A.2 i). **To the extent possible, this separate accounting should be consistent with the characteristics and intent of each case and comply with the Open Access Transmission Tariff and with the Régie's previous decisions.** (emphasis added)

In the same decision, moreover, the Régie referred to two other decisions that offered an interpretation of section 12A.2 which do not correspond to the Transmission Provider's proposal in this matter.

> [29] For the purpose of validating purchase commitments, the Transmission Provider must, among other things, comply with the conditions set out in decisions D-2006-66 and D-2007-08 regarding section 12A.2. The Régie defined the purpose of this section as follows:
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>> The purpose of section 12A.2 is to ensure that any new connection generates <u>additional</u> revenue that covers the allied costs. <u>This objective is ensured by rate neutrality, whose methodology is adapted to the specific circumstances of each project.</u> (emphasis added)

AQCIE and QFIC share the Régie's concern about the impact on rates of using the surplus current value of a project as revenue that can be used for another project. It is our opinion that revenue from existing transmission agreements that were associated with prior investment projects cannot be used to justify the Transmission Provider's allocation in another investment project without having an upside impact on the existing customers' rates. Such a rate increase certainly does not conform with the principle of rate neutrality.

Take, for example, the integration project for the La Romaine project generating stations. The incorporation of the costs of connecting these generating stations into the rate base was justified by the surplus revenue from firm point-to-point service agreements then in effect, prior to the initial disbursements for the investments to integrate the La Romaine generating stations. The revenue used to justify the Transmission Provider's allocation to the investment associated with connecting the La Romaine complex generating stations is not new. In other words, the investment expense associated with load growth to incorporate the La Romaine generation stations has increased without the presence of new revenue. *Ceteris paribus*, this situation can only result in putting upside pressure on the rates that current customers must pay. That is a flagrant breach of the principle of rate neutrality.

Moreover, the proposal in this matter goes even further than the proposal made in the context of R-3669-2008 with respect to the amalgamation of all capital projects for a point-to-point customer. In fact, this proposal strays from the Régie's intent, reiterated above, that accounting must respect the characteristics and purposes of each of the files. Such an amalgamation process moves away from the principle of cost causation.

Another Régie decision provides further enlightenment to the debate. In decision D-2011-083, the Régie agreed to consider revenue from existing service agreements entered into for investment files separate from the file in question, that is, the connection of the La Romaine complex generating stations. Note that, at the time, the Régie mentioned that its decision was partly based on the wording of the Transmission Tariff that was then in effect:

> [62] It is desirable for decisions to be consistent, but there is reason to distinguish between rulings and opinions in the Régie's decisions. Thus, with respect, the current panel does not share the reservations expressed by the Régie in file R-3669-2008, decision D-2009-071, page 11, on “the Transmission Provider's proposal to use the surplus current value of a project as revenue that can be allocated to another project [...]” because, among other things, it is not stipulated in the Transmission Tariff.
>
> [63] This issue, and the issue of tracking the contractual commitments of the Transmission Provider's customers, have been transferred from one rate case to another, and finally deferred to a generic case that the Régie asked the Transmission Provider to file in 2011.
>
> [64] In the context of this request for authorization, the issue emerges concretely and calls for a decision on whether or not the Producer's service agreements comply with the provisions of section 12A.2i), as currently written. [Régie's emphasis]

It is our opinion that the wording of section 12A.2i) should be amended to ensure that the Transmission Provider complies with the interpretation given by the Régie in decisions D-2009-071 and D-2008-08.

The text should clearly indicate that any new connection must generate additional revenue stemming from new service agreements. We are aware that changes to the text of the Transmission Tariff will occur in Phase 2 of this matter.

Another aspect to consider in the Transmission Provider's proposal is that only Hydro-Québec Production, due to its dominant market position and the legislative context,[4] has the means and capability to recuperate the surplus revenue from the many point-to-point reservations it has by building large generating stations for export purposes. This situation means it could be rational for the Producer to set aside major portions of export

[4] Act respecting the exportation of electric power, CQLR c E-23

capacity for interconnection, as it could potentially recuperate the surplus revenue to finance the costs of connecting its new generating stations. For this reason, it appears that the proposed methodology means that the other point-to-point customers are not treated the same as the Producer. The Régie must ensure that the Transmission Provider's upgrades policy ensures equitable treatment for all customers, including point-to-point customers.

Pursuant to their proposal to amend section 12.A2i (see above), AQCIE and QFIC recommend that the Transmission Provider's maximum allowance for meeting point-to-point customer needs should only be granted for network investments that generate additional revenue.

For example, replacing an existing generating station with another one should not be eligible for the Transmission Provider's allowance, as no new revenue can be associated with the new investment.

In our opinion, the Transmission Provider's proposal, as illustrated in attachment 2 of the HQT-1 document, document 1 revised October 31, 2014, deprives customers of contemporary surplus revenue (service agreements in effect) by using that revenue to meet the Producer's needs (Commitments under section 12A.2i)). In addition to favouring the Producer for financing the connection of its installations, this proposal results in favouring future customers, which could eventually benefit from the Transmission Provider's surplus revenue once the Producer's commitments have been met, resulting in future rate cuts.

Lastly, the treatment of interconnection connection should be dealt with in section 12A of the Transmission Tariff to ensure consistency with the wording of Attachment J.

In fact, just as a generating station connection can occur for a point-to-point customer to supply an existing interconnection, there could very well be a connection of a new interconnection to meet demand from a point-to-point customer for energy from an existing generating station with surplus capacity.

4. NETWORK PLANNING IN THE CONTEXT OF THE UPGRADES POLICY

In its supplementary evidence, the Transmission Provider remarks that[5]

[5] Exhibit B-0011, page 24, lines 4 to 16.

> Such upgrades can sometimes exceed the requestor's strict needs. This situation can arise, for example, in a case in which it is impossible to acquire a standard piece of equipment that perfectly matches the service request. The surplus capacity thus created is limited and is consistent with the very nature of investments in power system upgrades. In other cases, the upgrades required for the requestor result in subsequently resolving an operational constraint for all users.
>
> Upgrades to the primary transmission system benefit everyone and can allow for new customers or for greater network use by existing customers without additional investment. Such customers, by generating additional transmission revenue, all other things being equal, prompt a decrease in the rate for all customers of the transmission service, including the customer behind the upgrades.
>
> The Transmission Provider understands that the concept of user-pay raised by the Régie corresponds to a concept of cost sharing among beneficiaries. (emphasis added)

We understand that the Transmission Provider may have recourse to solutions to optimize the network that result in increasing transmission capacity at the lowest possible cost, in compliance with the network's design criteria.

Before addressing planning issues, we should note that, in the above excerpt, the Transmission Provider asserts that the influx of new customers or greater use of the network by existing customers will generate additional transmission revenue, resulting in a lower rate for existing customers. We must emphasize that this statement does not take into consideration the Transmission Provider's proposal about the handling of network upgrades for point-to-point customers (see section 3 above), which would mean that any surplus revenue would automatically be used, by means of the complementary refund," to refund the commitments of the customers generating additional revenue. This proposal would therefore mean that the other customers would not necessarily benefit from the rate decrease mentioned in the above excerpt.

That being said, with respect to the issue of planning in the framework of the upgrades policy, our understanding is that the Transmission Provider's network is designed to deal with anticipated needs during the winter peak (1-CP). Consistent with the principle of rate neutrality, the network can therefore not be designed to meet needs that do not generate revenue. More specifically, the network must be designed to meet the anticipated native load needs established by the Distributor, and firm point-to-point service needs covered by agreements in effect.

The establishment of the winter peak for planning purposes must be consistent with the methodology the Transmission Provider uses to establish the transmission rate applicable to native load and point-to-point customers. The rate is calculated using the ratio between the required revenue, in $, and the network peak (MW). As shown in table 5 of document HQT-12, document 1 of the Transmission Provider's rate case 2015,[6] reproduced below, the denominator in the annual rate calculation is composed of the total of annual native load transmission needs and point-to-point transmission service needs:

Table 5

Establishment of the annual rate

Proposed revenue required = $3,211.3 M

Revenue from short-term point-to-point services = $31.6M

Residual revenue required = 3,211.3 - 31.6M = $3,179.7M

Native load transmission needs = 37,818 MW

Integrated network transmission service needs = 0 MW

Annual point-to-point transmission service needs = 4,679 MW

Long-term transmission needs = 37,818 MW + 0 MW + 4,679 MW = 42,497 MW

Annual rate = $3,179.7 M / 42,497 MW x 1,000 = $74.82/kW/year]

In our opinion, network planning should be consistent with the rate calculation. Yet in the investment file for the 735 KV Bout-de-l'île- Chamouchouane (R-3887-2014) line, factors in the evidence suggest that the Transmission Provider planned the network using a peak calculation mechanism other than the mechanism used in calculating the rate. We are aware that this matter is currently being deliberated by another board, which is why we refer to it solely for the purpose of illustration, to help the Régie thoroughly grasp the issue associated with planning in the context of network upgrades. The purpose here is to clarify the upgrades policy prospectively.

In fact, in the context of this hearing, it has been shown that, unlike the investment projects associated with the wind energy integration agreement (R-3742-2010) and the La Romaine integration file (R-3757-2011), the estimated peak for network planning in the line project was 1200 MW higher than the total forecast peak for the native load and the quantities stipulated in firm point-to-point service agreements in effect that covered the planning period. The table below shows that the peak estimated for network planning

[6] File R-3903-2014, exhibit B-0030, page 8.

in file R-3887-2014 was overestimated in relation to the service agreements then in effect. In fact, if we consider all of the agreements covering the line's forecast commissioning period, that is the winter of 2018-2019, there is 4,407 MW in firm point-to-point service demand, 728 MW less than the 5,135 MW projected in the line file. This figure rises to more than 1200 MW[7] for transmission agreements lasting more than 20 years.

[7] 5,135 MW projected in file R-3887-2014 less the Producer's long-term service agreements, i.e. 1,321, 1,268 and 1,268 MW for a difference of 1,278 MW.

Table 1

Value associated with the native load, point-to-point transmission service and joint production of different requests			
	Bout-de-l'Ile-Chamouchouane (R-3887-2014)	) A/O 2005-03 (R-3742-2010)	Romaine (R-3757-2011)
Native load (MW)	40,765	41,840	41,525
Point-to-point transmission service (MW)	5,135	3,935	2,275
Connected output (MW)	45,900	45,775	43,800

Sources: File R-3887-2014, exhibit B-0025, R.6.1., page 16 and exhibit B-0037, R14.2, page 21.

Projected long-term point-to-point transmission service needs in effect on forecast commissioning of the 735 kV Chamouchouane-Bout-de-l'Ile line in winter 2018-2019	
Producer's projected needs 50-year reservation for delivery to ON	1,321
35-year reservation for delivery to MASS	1,268
35-year reservation for delivery to NS	1,268
Reservation applying to October 2022 for delivery to HIGH	238
Reservation applying to December 2019 for delivery to CORN	48
Projected needs of other customers Reservations of 53 MW, 53 MW and 106 MW applying until March	
Total:	4,407
Source: File R-3903-2014, exhibit B-0027, page 6	

The overestimate mean that the solutions contemplated to meet the Transmission

Provider's alleged needs may not have been consistent with the Transmission Provider's usual practice, as they were based on a peak demand that was higher than the demand that could be associated with projected revenue. We are entitled to wonder whether the proposed solutions would have been different if the network had been planned with a lower forecast peak that corresponded to known data.

In our opinion, it would be contrary to the principle of rate neutrality and unfair to existing customers to have network upgrades, regardless of the justification, be designed to meet peak demand from future point-to-point customers that do not offer guaranteed revenue. It is critical for investments in network upgrades to correspond to revenue that is secured by signed service agreements and the Distributor's projected demand to supply its native load.

As stated in the written argument from AQCIE and QFIC (see excerpt above), it would be appropriate for the Régie, in this matter, to rule on the parameters the Transmission Provider must use for network planning that leads to large investments that could potentially be used for future point-to-point service requests[8]:

> 19. Subsidiarily, assuming that the Régie judges that it is able to rule on the request on the basis of the evidence before it, and assuming it were to find the Transmission Provider's request justified, we submit that a process must be established that would prevent what an AQCIE-QFIC witness has called "free riders" from benefiting from the line, i.e. users that would benefit from the fact that the line was authorized today and paid for by all customers, while their requests would, quite opportunely for them, only occur at some point in the future and not require them to make any specific contribution.
>
> 20. It is also apparent to us that it would be appropriate to consider this issue, if applicable, in the context of examining the Transmission Provider's proposed upgrades policy, covered by file R-3888-2014, now underway. (emphasis added)

Given the abovementioned factors, **AQCIE and QFIC recommend that the Régie codify in the upgrades policy or the Transmission Tariff the fact that the Transmission Provider must plan its network based on projected native load needs and the needs of point-to-point customers that have signed long-term firm transmission service agreements.**

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[8] Exhibit C-AQCIE-QFIC-0013.

5. SUMMARY OF OUR RECOMMENDATIONS

Guiding principles

- AQCIE and QFIC ask the Régie to clearly restate the principles of rate neutrality and intergenerational equity in the wording of the Transmission Provider's upgrades policy.

NETWORK UPGRADES FOR THE DISTRIBUTOR

- AQCIE and QFIC support the Transmission Provider's proposal to include resource project investments with native load growth investments, as it complies with the principle of rate neutrality.

- AQCIE and QFIC recommend that the Régie ensures that the Transmission Provider considers all network conversion capacity, including the capacity from installations in which no investment has been made since 2006, so that the Transmission Provider correctly estimates the incremental revenue in establishing the Distributor's contribution.

- AQCIE and QFIC recommend that the Transmission Provider's maximum allowance calculation be based on a 40-year period.

- To abide by the principles of rate neutrality and intergenerational equity, AQCIE and QFIC recommend to the Régie that the exercise of establishing the Distributor's contributions be done annually without factoring in prior-year surpluses. This way, the potential surpluses could be incorporated into the rate base each year and benefit current customers, which could enjoy a rate decrease.

NETWORK UPGRADES FOR POINT-TO-POINT CUSTOMERS

- AQCIE and QFIC are of the opinion that the wording of section 12A.2i) should be amended to ensure that the Transmission Provider complies with the interpretation given by the Régie in decisions D-2009-071 and D-2008-08.

- Pursuant to their proposal to amend section 12.A2i, AQCIE and QFIC recommend that the Transmission Provider's maximum allowance for meeting point-to-point customer needs should only be granted for network investments that generate additional revenue.

- AQCIE and QFIC recommend that treatment of interconnection connection be included in section 12A of the wording of the Transmission Tariff to ensure consistency with the wording of Attachment J.

NETWORK PLANNING IN THE CONTEXT OF THE UPGRADES POLICY

- AQCIE and QFIC recommend that the Régie codify in the upgrades policy or the Transmission Tariff the fact that the Transmission Provider must plan its network based on projected native load needs and the needs of point-to-point customers that have signed long-term firm transmission service agreements.