

# RÉGIE DE L'ÉNERGIE

## DOSSIER R-3640-07

### RÉPONSE À LA DEMANDE DE RENSEIGNEMENTS NO 1 DE LA RÉGIE DE L'ÉNERGIE

#### RNCREQ / UC

RÉFÉRENCE 1: | Raphals, Rapport d'expertise

pages 12 - 13

Préambule:

More important, however, on the conceptual level, is the disruption this change makes to the overall economy of TransÉnergie's open access transmission tariff. A fundamental aspect of the structure of the *Terms and Conditions*, derived directly from FERC's *pro forma* tariff on which it was based, is the distinction between categories of client that bear responsibility for a share of the Transmission Provider's revenue requirement (native load and network integration customers), and those that purchase a service at a fixed price (point-to-point customers).

In establishing a retroactive modification of a point-to-point price, the basic architecture of the open access tariff is modified. I am not aware of any Transmission Providers whose point-to-point rates are subject to retroactive modification many months after the transaction has been executed and several months after the service has been provided.

Retroactive modification of long-term point-to-point rates to dispose of the *compte d'écarts* also creates an unusual feedback loop with respect to these rates. Thus, differences between forecast and actual revenues from long-term customers are, in part, recovered from or returned to these same customers.

**For all these reasons, I would urge the Régie to reconsider its decision in D-2007-08 to include long-term customers in the disposition of this account. Given the close similarity between long-term and short-term service, already recognized by the Régie in the passage quoted above, my recommendation is to *include* long-term service in calculating the *compte d'écart*, but to *exclude* it from the distribution.**

- 1.1 Veuillez préciser votre énoncé concernant le lien entre le mode de disposition du compte d'écart et le tarif pro forma de la FERC, notamment à l'égard des clientèles qui assument ou non la responsabilité des revenus requis du Transporteur et à l'égard de la modification rétroactive d'un tarif.

#### RÉPONSE :

Le *tariff pro forma* de la FERC, établi en vertu de son Ordonnance 888, distingue deux types de tarif : le tarif en réseau intégré et les tarifs de point à point. Au Québec, il n'y a pas de clients au tarif en réseau intégré, mais les dispositions qui s'appliquent à la charge

locale (Partie IV du *Tarifs et conditions*) ont été empruntées en grande mesure de celles du tarif en réseau intégré.

Selon l'article 34 du *pro forma tariff*, la tarification en réseau intégré se fait en vertu des *Load Ratio Shares (Parts du ratio de charge)*. Cette méthodologie est décrite à la section 5.2.2 du rapport d'expert que j'ai déposé, conjointement avec MM. Peter A. Bradford et Ellis O. Disher, dans le dossier R-3401-98, aux pages 33 à 37, produit comme Annexe A.

Selon cette méthodologie, tout client au tarif en réseau intégré paie, mensuellement, une proportion du revenu requis du Transporteur qui correspond à son *Load Ratio Share*. Cette proportion est fixée en tenant compte, d'une part, de la pointe mensuelle du client, de celles des autres clients en réseau intégré, de la pointe du réseau et, d'autre part, de la quantité de réservations fermes du service de point à point au moment de la pointe.

Dans la décision D-2002-95, la Régie n'a pas retenu cette méthodologie, la remplaçant par celle qui est en vigueur maintenant. Selon cette nouvelle méthodologie, la facture de la charge locale est fixée en avance sur une base annuelle, au *pro rata* de sa pointe prévue, tenant compte des réservations de point à point long terme seulement (et après soustraction des revenus prévus du service de point à point de court terme).

Dans ce sens, la méthodologie de la Régie crée un traitement similaire, en partie, entre la charge locale et les clients de point à point de long terme. Cette correspondance ressemble, en partie, à l'énoncé de la FERC cité à la page 36 de l'Annexe A, où elle précise que toute réservation ferme (peu importe sa durée) doit être traitée comme une charge pour les fins de l'allocation des coûts et de la planification.

Toutefois, la différence fondamentale entre les types de service demeure : la charge locale, comme le réseau intégré, doit inévitablement absorber la part des revenus requis que la méthodologie lui accorde. Le client de point à point long terme, lui, prend une décision d'affaires, soit d'acheter un produit à un prix affiché. Ainsi, la charge locale est responsable pour l'ensemble des revenus requis du Transporteur, après avoir tenu compte des réservations et revenus du service de point à point. Les clients de point à point, eux, sont responsables uniquement pour les achats qu'ils ont faits aux prix affichés sur OASIS.

Vu de cette manière, le fait que la facture de la charge locale soit ajustée, à la hausse ou à la baisse et ce de façon rétroactive, est tout à fait cohérent avec sa nature. Notons par ailleurs que, selon la méthodologie du *pro forma tariff*, le tarif en réseau intégré est *toujours* connu seulement après coup, et dépend toujours du niveau de ventes du service de point à point. Par ailleurs, c'est seulement dû à la modification de la méthodologie du *pro forma tariff* introduite par la décision D-2002-95 que le compte d'écart devient nécessaire — dans la méthodologie originale, ce *true-up* se faisait automatiquement.

Les tarifs de point à point, par contre, sont toujours connus en avance, que ce soit en vertu du *pro forma tariff*, du règl. 659 ou des *Tarifs et conditions* actuellement en vigueur. À mon avis, modifier le tarif de point à point de façon rétroactive va à l'encontre de la nature même du service et de son utilisation. Cela est d'autant plus vrai étant donné que, comme l'ont noté d'autres participants dans cette audience, la modification rétroactive risque de se produire même après la clôture de l'année fiscale où la transaction a eu lieu.

**ANNEXE A**

***EXTRAITS DE:***

R-3401-98

TESTIMONY OF

**PHILIP RAPHALS,  
PETER BRADFORD  
AND ELLIS O. DISHER**

ON BEHALF OF THE RNCREQ

February 7, 2001

$$\begin{aligned}
r_a &= 12 * (RR / (\sum P_m + Q_a * 12)) \\
&= 12 * (\$2,674 \text{ M} / (287,082 \text{ MW} + 3,844 * 12)) \\
&= 12 * (\$2,674 \text{ M} / 333,210 \text{ MW}) \\
&= 12 * \$8.02 \\
&= \$96.30 \text{ kW/yr.}
\end{aligned}$$

## 5.2. Determining charges for network integration service

### 5.2.1. Hydro-Québec's proposed modifications to its open access tariff

Hydro-Québec proposes substantial modification to the provisions of reg. 659 that determine charges for network integration service. These modifications are indicated in the redline tariff version found at HQT-11, doc. 2 (en liasse). The proposed text reads as follows (our translation):

**1.17<sup>80</sup> Load Ratio Share:** Ratio of a ~~Transmission Customer's Network Load to the Transmission Provider's total load~~ Network Customer's Annual Network Load and the Annual Transmission System Load, computed in accordance with Sections 34.2 and 34.3 of the Network Integration Transmission Service under Part III of the present Tariff ~~and calculated on a rolling twelve month basis.~~

**34.2 Determination of Network Customer's ~~Monthly~~ Annual Network Load:** The Network Customer's ~~monthly~~ Network Load is its hourly load (including its ~~designated~~ Network Load not physically interconnected with the Transmission Provider under Section 31.3) coincident with the Transmission Provider's ~~Monthly~~ Transmission System Peak. Corresponds to the Network Customer's forecast maximum annual load.

**34.3 Determination of Annual ~~Monthly~~ Transmission System Load:** The ~~Transmission Provider's monthly~~ Transmission System load is the ~~Transmission Provider's Monthly~~ Transmission System Peak ~~minus the coincident peak usage of all Firm Point To Point Transmission Service customers pursuant to Part II of this Tariff plus the Reserved Capacity of all Firm Point To Point Transmission Service customers.~~ Corresponds to the sum of the maximum annual load forecast for Native Load and the maximum annual load forecast for each Network Customer.

Hydro-Québec describe these changes as follows:

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<sup>80</sup> S. 1.27 in the French version.

- 1.27 The definition [of Load Ratio Share] is modified to reflect the proposed content of ss. 34.2 and 34.3.
- 34.2 A calculation based on the annual system peak is better adapted to the particularities of Québec consumption which led Hydro-Québec to build its grid to meet the winter peak. Correction of a methodological error.
- 34.3 A calculation based on the annual system peak is better adapted to the particularities of Québec consumption which led Hydro-Québec to build its grid to meet the winter peak. Correction of a methodological error.<sup>81</sup>

In his evidence on behalf of Hydro-Québec, Mr. Albert Chéhadé elucidates this “methodological error,” explaining that the definition of Load Ratio Share must be modified because it does not permit recovery of the revenue requirement specified in Attachment H:<sup>82</sup>

Taking into account the addition of point-to-point capacities in the denominator, the sum of the load ratio shares of network integration clients will never reach 100%.<sup>83</sup>

This explanation reflects an important misunderstanding of the FERC’s methodology for recovering the transmission revenue requirement, as set out in the *pro forma* tariff and described in the following section.

### 5.2.2. Setting network integration rates under the *pro forma* tariff

Under the *pro forma* tariff, and hence under reg. 659 in its current form, network integration rates are set as follows:

- ♦ According to s. 34.1, the network service customer pays a Monthly Demand Charge (*Prix requis mensuel*), equal to one-twelfth of the Annual Transmission Revenue Requirement specified in Attachment H, multiplied by the customer’s Load Ratio Share (*Part du ratio de charge*).
- ♦ According to s. 1.17 (or s. 1.27 in the French version), the Load Ratio Share is the ratio of the customer’s Network Load (*Charge en réseau*) to the Transmission Provider’s total system load (*charge totale du transporteur*), calculated on a rolling twelve-month basis.
- ♦ According to s. 34.2, the customer’s Network Load is its hourly load coincident with the Transmission Provider’s monthly system peak.

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<sup>81</sup> HQT-11, doc. 1, pp. 12-13.

<sup>82</sup> HQT-10, doc. 1, pp. 29-30.

<sup>83</sup> HQT-10, doc. 1, p. 30, l. 15-17. « En considérant les capacités de point à point au dénominateur, la somme de toutes les parts du ratio de charge des clients en réseau intégré n’atteint jamais 100 %. »

- ♦ According to s. 34.3, the Transmission Provider's Total System Load is defined as its monthly system peak, minus coincident peak usage of all firm point-to-point customers, plus the reserved capacity of all firm point-to-point customers.

Thus, the monthly charge for a network customer is set at:

$$r_m = RR * LRS / 12 \quad (\text{s. 34.1})$$

where

$$LRS = \frac{\text{Network Load at system peak}}{\text{Total System Load}} \quad (\text{s. 1.17})$$

and:

$$\begin{aligned} \text{Total System Load} = & \text{monthly system peak} \\ & - \text{coincident point-to-point usage} \\ & + \text{point-to-point reservations at system peak} \quad (\text{s. 34.3}) \end{aligned}$$

Calculating adjusted system load in this way has the effect of replacing the *actual* point-to-point load during the system peak with the *reserved* firm point-to-point load at system peak. Thus, Total System Load (the denominator of the LRS calculation) can also be thought of as equal to:

$$= \text{actual system peak} + \text{unused point-to-point firm reservations},^{84}$$

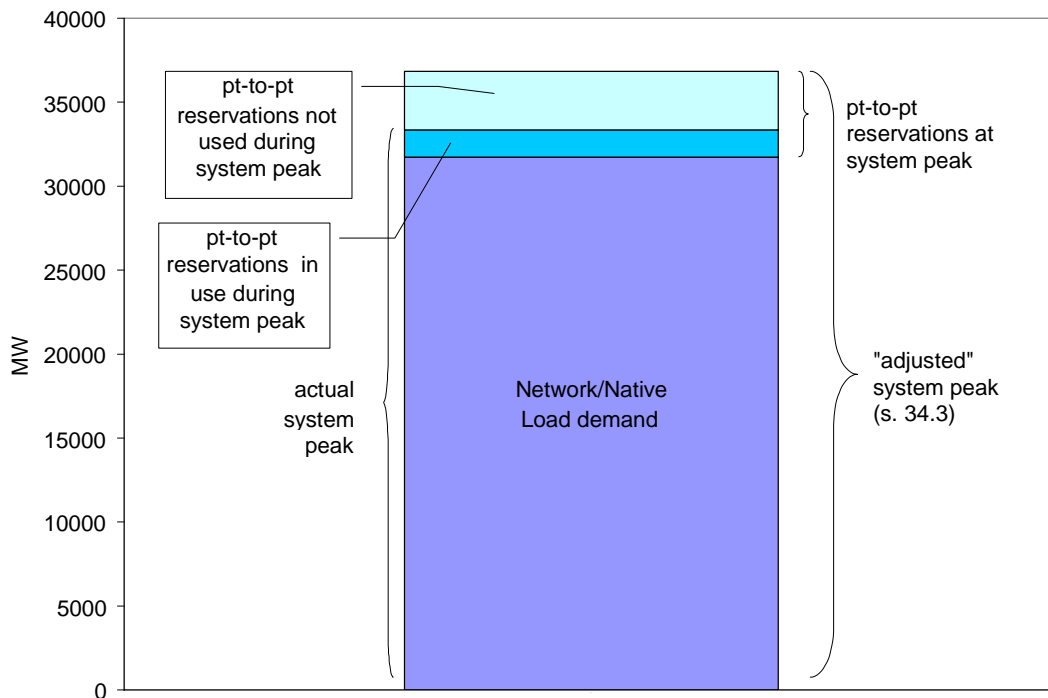
or

$$= \text{Network Load} + \text{Firm Point-to-Point Reservations at system peak},$$

as seen in the following chart:

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<sup>84</sup> It is described in these terms by B.C. Hydro in B.C. Hydro, Grid Operations & InterUtility Affairs, *Wholesale Transmission Services Pricing: Simplified Guide*, p. 1.



Under this system, in the case where there is just one network customer and no firm point-to-point reservations at the monthly system peak, the network customer is charged 100% of the monthly revenue requirement. However, if there are firm point-to-point reservations in effect at the moment of the system peak, the network customer's charge is reduced to reflect the percentage of Total System Load for which the point-to-point customer is responsible, whether or not his reservation was actually used at that moment.

The underlying logic is that, since the Transmission Provider must meet point-to-point reservations as well as network needs at its system peak, the revenue requirement should be shared between them on a *pro rata* basis. This logic was explained by FERC in Order 888:

The flexibility and reassignment rights of this [firm point-to-point] transmission service require the transmission provider to hold the firm contract capacity available regardless of the customer's own load characteristics or its actual use. In other words, a transmission provider's obligation to plan for, and its ability to use, a transmission customer's reserved capacity is clearly defined by that customer's contract reservation. For these reasons, it is appropriate to consider a firm reservation as the equivalent of a load for cost allocation and planning purposes.<sup>85</sup>

In order to prevent over-recovery of costs for those who use this approach, we will require transmission providers to include firm point-to-point capacity reservations in the derivation of their load ratio calculations for billings under network service. In

<sup>85</sup> This view is apparently not shared by Hydro-Québec, which states that the ultimate responsibility for meeting the cost of service rests with native load (HQT-13, doc. 1, p. 105).

addition, revenue from non-firm service should continue to be reflected as a revenue credit in the derivation of firm transmission tariff rates.<sup>86</sup> (emphasis added)

In other words, since the Transmission Provider must make reserved capacity available, even if it is not used, and since the point-to-point customer must pay for that reservation even if he does not use it, the network customer's payments should be reduced based on reservations and not on usage.

Because this mechanism is based on capacity reservations, not on *revenues* from point-to-point reservations, it follows that the network charge will be the same, whether or not point-to-point rates are discounted. This further implies that the transmission provider will only recover its full revenue requirement to the extent that its firm point-to-point service is not discounted. It thus means that any discounts for firm service are in the end absorbed by the shareholder, not the regulated ratepayer.

Given this structure, there can be no doubt that the "Annual Revenue Requirement for purposes of the Network Integration Transmission Service" indicated in Attachment H is the Transmission Provider's full revenue requirement, not just the portion to be paid by network customers. It would thus be entirely inappropriate to recover this entire amount from network customers, as Hydro-Québec has done since 1997 and as it proposes to formalize in the modifications to reg. 659 proposed in the present filing.

Furthermore, insofar as the amount given in Attachment H of reg. 659 reflected Hydro-Québec's real revenue requirement when the tariff was adopted in 1997, it would also appear that the utility has overcollected its revenue requirement in each year, since the network customer made payments equal to this full amount, with no deduction for point-to-point revenues.

### 5.2.3. Setting network rates under Hydro-Québec's proposal

Hydro-Québec's proposed modifications to s. 34 would have the effect of completely removing point-to-point reservations from the calculation of Load Ratio Shares. At the same time, they would in effect change the basis for pricing of network service from 12-CP to 1-CP. We will address these two issues in the following sections:

#### 5.2.3.1. Treatment of point-to-point reservations in determining Load Ratio Share

Hydro-Québec's proposed methodology consists of the following steps:<sup>87</sup>

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<sup>86</sup> FERC, Order 888, pp. 303-304.

<sup>87</sup> HQT-10, doc. 1, p. 32.