

**RÉPONSES DU TRANSPORTEUR  
À LA DEMANDE DE RENSEIGNEMENTS NUMÉRO 1  
D'ONTARIO POWER GENERATION INC. (OPG)**



1 **Date: 9 September 2005**  
2 **Re: Interrogatories on Evaluation of Provisional Discount Policy**  
3 **(HQT-2,**  
4 **Doc. 3) and the Evidence of Ren Orans (HQT-4, Doc. 3)**  
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6 **Previous Discounting Experience**

7 References: R-3549-2004 – Phase 2, HQT-2, Document 3, page 5  
8 Preamble: The Background section of HQT's Evaluation of Provisional  
9 Discount Policy ("Evaluation") notes at page 5 that "From 1997 to 2001,  
10 *Hydro-Québec bylaw number 6591* allowed the Transmission Provider to offer  
11 discounts applicable on every point-to-point service that it offers. This  
12 provision conforms to that adopted by the *Federal Energy Regulatory*  
13 *Commission* (FERC) under order 888."

14 1.1 Please provide HQT's evaluation of the impact of the discounting  
15 regime that was in place during the 1997 to 2001 period.

16 **R1.1 Le Transporteur n'a pas réalisé une telle analyse. Le**  
17 **Transporteur rappelle par ailleurs que pendant cette période,**  
18 **les conditions dans les marchés environnants étaient fort**  
19 **différentes. Notamment, le marché de l'Ontario n'était pas**  
20 **ouvert.**

21 **Design of Discount Policies in other Jurisdictions**

22 References: R-3549-2004 – Phase 2, HQT-2, Document 3, page 6-7  
23 Preamble: Section 2.1 of HQT's Evaluation describes the Discount Policy that  
24 was in place from January 15, 2003 to January 14, 2004. The impact of this  
25 Discount Policy on capacity utilization and total revenue is clearly dependent  
26 on its specific design characteristics.

27 2.1 Please confirm that HQT's Evaluation addresses only the specific  
28 design of the Discount Policy that was in place from January 15, 2003  
29 to January 14, 2004 and that it does not evaluate other possible  
30 discount policies such as those that are utilized in other jurisdictions.

31 **R2.1 Le Transporteur le confirme.**

1 2.2 Please provide details of any discount policies of Transmission  
2 Providers that are known to HQT. In particular, please describe the  
3 discount policies and practices of the Midwest ISO. For each discount  
4 policy described please include details pertaining to:

- 5 • The period during which discounts are available (off-peak,  
6 on-peak, within a day, seasonally, etc),  
7
- 8 • The length of the period for which reservations can be  
9 obtained at the discounted price (hourly, daily, weekly,  
10 monthly, etc.),  
11
- 12 • The amount of discretion allowed the Transmission  
13 provider to determine (i) the shippers that qualify for the  
14 discount, (ii) the amount of the discount, etc.,  
15
- 16 • The degree of transparency of the discounts provided,  
17
- 18 • Whether different discounts apply to different (i) paths, (ii)  
19 types of transmission customers, (iii) exports vs. wheeling,  
20 (iv) other criteria,  
21
- 22 • Reduced rates that apply specifically to exports and/or  
23 wheeling power through the Transmission Provider's  
24 system, and  
25
- 26 • The extent to which specific consideration is given to  
27 competitive alternatives in determining the discount  
28 provided to customers.

29 **R2.2 Réponse du Dr Ren Orans :**

30 **HQT is aware of only one other jurisdiction, British Columbia,**  
31 **in which discounting is subject to an explicit, transparent,**  
32 **formula. For every other jurisdiction studied, including the**  
33 **Midwest ISO, the stated discount policy is based on the FERC**  
34 **pro forma tariff. The following paragraph from the Midwest**  
35 **ISO FERC Electric Tariff is typical:**

1                   “Discounts: Three principal requirements apply to discounts  
2                   for transmission service as follows: (1) any offer of a discount  
3                   made by the Transmission Provider must be announced to  
4                   Eligible Customers solely by posting on the OASIS, (2) any  
5                   customer-initiated requests for discounts (including requests  
6                   for use by one’s wholesale merchant or an affiliate’s use) must  
7                   occur solely by posting on the OASIS, and (3) once a discount  
8                   is negotiated, details must be immediately posted on the  
9                   OASIS. For any discount agreed upon for service on a path,  
10                  from Point(s) of Receipt to Point(s) of Delivery, the  
11                  Transmission Provider must offer the same discounted  
12                  transmission service rate for the same time period to all  
13                  Eligible Customers on all unconstrained transmission paths  
14                  that go to the same Point(s) of Delivery on the Transmission  
15                  System.”

16                  (Midwest ISO, FERC Electric Tariff, Third Revised Volume No. 1,  
17                  Second Revised Sheet No. 989 and repeated several other places.  
18                  [http://www.midwestmarket.org/publish/Document/2b8a32\\_103ef711180\\_-  
19                  75c40a48324a/Schedules.pdf?action=download&\\_property=Attachment](http://www.midwestmarket.org/publish/Document/2b8a32_103ef711180_-75c40a48324a/Schedules.pdf?action=download&_property=Attachment))

20                  **This does not mean that posted rates for transmission service**  
21                  **are always uniform; on the contrary, many transmission**  
22                  **providers have PTP rates that vary by time of day, as can be**  
23                  **seen in the following table of Canadian transmission**  
24                  **providers:**

1

Rate	BC	Saskatchewan	Manitoba	New Brunswick	Nova Scotia
Monthly firm	$\$/kW\text{-year} \div 12$ months	$\$/kW\text{-year} \div 12$ months	$\$/kW\text{-year} \div 12$ months	$\$/kW\text{-year} \div 12$ months	$\$/kW\text{-year} \div 12$ months
Monthly non-firm	Capped at firm rate	Capped at firm rate	Capped at firm rate	Capped at firm rate	Capped at firm rates
Weekly firm	$\$/kW\text{-year} \div 52$ weeks	$\$/kW\text{-year} \div 52$ weeks	$\$/kW\text{-year} \div 52$ weeks	$\$/kW\text{-year} \div 52$ weeks	$\$/kW\text{-year} \div 52$ weeks
Weekly non-firm	Capped at firm rate	Capped at firm rate	Capped at firm rate	Capped at firm rate	Capped at firm rates
Daily firm (on-peak)	Formula, capped at daily firm rate equivalent	$\$/kW\text{-week} \div 5$ days	$\$/kW\text{-week} \div 5$ days	$\$/kW\text{-week} \div 5$ days	$\$/kW\text{-week} \div 5$ days
Daily firm (off-peak)	Formula, capped at daily firm rate equivalent	Not offered	$\$/kW\text{-week} \div 7$ days	$\$/kW\text{-week} \div 7$ days	$\$/kW\text{-week} \div 7$ days
Daily non-firm	Formula, capped at daily firm rate equivalent	Capped at firm rates	Capped at firm rates	Capped at firm rates	Capped at firm rates
Hourly firm (on-peak)	Formula, capped at hourly firm rate equivalent	Not offered	Not offered	Not offered	Not offered
Hourly firm (off-peak)	Formula, capped at hourly firm rate equivalent	Not offered	Not offered	Not offered	Not offered
Hourly non-firm	Formula, capped at hourly firm rate equivalent	Capped at daily rate / 16 hours	On-peak: Capped at daily rate / 16 hours; Off-peak: Capped at daily rate / 24 hours	On-peak: Capped at daily rate / 16 hours; Off-peak: Capped at daily rate / 24 hours	On-peak: Capped at daily rate / 16 hours; Off-peak: Capped at daily rate / 24 hours

2



1 3.2 Please confirm that all reservation hours in each month shown in the  
2 tables did not occur during the same hour within the month and that  
3 each hour within each month during which reservations occurred  
4 would have had different prices and different price differentials.  
5 Hence, please confirm that the differentials shown in the tables are  
6 the average differentials in each month. Please explain how the  
7 averages were calculated.

8 **R3.2 Le Transporteur confirme que les réservations en question**  
9 **n'ont pas été réalisées à la même heure. Les moyennes ont été**  
10 **établies comme suit :**

- 11 • **Établissement de l'écart des prix des marchés pour chaque**  
12 **heure où il y avait une transaction et où l'écart était positif.**  
13 • **Calcul de la moyenne mensuelle des écarts ainsi calculés.**

14 3.3 Please provide for each month in each of Table 4 and Table 5 a  
15 breakdown showing, for each hour during the month during which  
16 there were reservations:

- 17 • the number of reservations (total of MW for the hour),  
18  
19 • the Ontario market price in that hour,  
20  
21 • the New England (or New York) market price in the same  
22 hour, and  
23  
24 • the price differential.

25 **R3.3 Compte tenu que l'information demandée est très**  
26 **volumineuse, soit plus de dix mille données, le Transporteur**  
27 **fournit un sommaire indiquant le pourcentage de transactions**  
28 **réalisées en fonction des écarts de prix des marchés. Il est**  
29 **possible de constater que la très grande majorité des**  
30 **transactions a été réalisée avec un écart de prix supérieur au**  
31 **tarif du service de transport de point à point horaire du**  
32 **Transporteur.**

1 **Tableau R3.3-1 – Réservations horaires avec rabais des clients tiers :**  
 2 **% de transactions selon l'écart de prix**  
 3 **des marchés Nouvelle-Angleterre et Ontario**

*Écart de prix des marchés Nouvelle-Angleterre et Ontario (\$CA)*

Année	Mois	Moins de 0 \$	0 \$ à 9 \$	10 \$ à 19 \$	20 \$ à 29 \$	Plus de 30 \$	Total
2003	15 au 31 janvier	-	-	-	-	-	-
2003	février	-	-	-	-	-	-
2003	mars	-	-	-	-	-	-
2003	avril	0%	1%	3%	4%	1%	9%
2003	mai	0%	0%	1%	1%	0%	2%
2003	juin	0%	0%	1%	2%	8%	12%
2003	juillet	0%	0%	0%	1%	2%	3%
2003	août	0%	0%	1%	2%	1%	4%
2003	septembre	0%	2%	2%	0%	0%	5%
2003	octobre	0%	1%	1%	0%	0%	2%
2003	novembre	0%	6%	18%	7%	2%	33%
2003	décembre	0%	1%	3%	20%	7%	30%
2004	1 au 14 janvier	-	-	-	-	-	-
4	<b>Total</b>	<b>1%</b>	<b>10%</b>	<b>29%</b>	<b>38%</b>	<b>21%</b>	<b>100%</b>

5 **Tableau R3.3-2 – Réservations horaires avec rabais des clients tiers :**  
 6 **% de transactions selon l'écart de prix**  
 7 **des marchés New York et Ontario**

*Écart de prix des marchés New York et Ontario (\$CA)*

Année	Mois	Moins de 0 \$	0 \$ à 9 \$	10 \$ à 19 \$	20 \$ à 29 \$	Plus de 30 \$	Total
2003	15 au 31 janvier	0%	0%	0%	0%	1%	2%
2003	février	-	-	-	-	-	-
2003	mars	1%	1%	2%	1%	3%	8%
2003	avril	1%	2%	3%	2%	4%	12%
2003	mai	0%	1%	1%	0%	1%	3%
2003	juin	1%	3%	2%	1%	6%	12%
2003	juillet	0%	1%	2%	5%	11%	19%
2003	août	0%	2%	2%	5%	7%	15%
2003	septembre	1%	2%	2%	2%	3%	9%
2003	octobre	1%	1%	0%	0%	0%	3%
2003	novembre	0%	1%	3%	2%	1%	7%
2003	décembre	0%	1%	2%	1%	4%	9%
2004	1 au 14 janvier	-	-	-	-	-	-
8	<b>Total</b>	<b>4%</b>	<b>14%</b>	<b>21%</b>	<b>20%</b>	<b>41%</b>	<b>100%</b>

1       **Non-Discounted Transactions and No-Reservation Discounted Hours**

2       References: R-3549-2004 – Phase 2, HQT-2, Document 3, page 10 - 12,  
3       Tables 3, 4, 5

4       Preamble: Table 3 shows that 84% of hourly ST PTP service reservations  
5       were during non-discounted (Period 1) hours. Furthermore, Tables 4 and 5 do  
6       not take into account the price differentials for hours during which there were  
7       no reservations, even with the additional information requested above.

8       4.1 Please provide tables similar to those requested in the preceding  
9       information request that show for each Period 1 hour the Ontario-New  
10       England and Ontario-New York price differentials. Also please  
11       provide a distribution similar to Figure 2 in the evidence of Ren Orans  
12       (HQT-4, Document 3) that plots the differential against the cumulative  
13       number of Period 1 hours.

14       **R4.1        Le bilan de la politique transitoire de rabais présenté à la pièce**  
15       **HQT-2, Document 2, correspond aux Périodes 2 et 3 du**  
16       **15 janvier 2003 au 14 janvier 2004, où le Transporteur a**  
17       **appliqué un rabais forfaitaire de 25 % au service de transport**  
18       **de point à point horaire, conformément à la décision D-2003-02**  
19       **de la Régie. Comme aucun rabais n'était appliqué aux heures**  
20       **de la Période 1, le Transporteur n'a pas effectué d'analyse de**  
21       **celle-ci.**

22       4.2 Please provide tables similar to those requested in the preceding  
23       information request that show for each Period 2 and 3 hour during  
24       which there were no reservations the Ontario-New England and  
25       Ontario-New York price differentials. Also please provide a  
26       distribution similar to Figure 2 in the evidence of Ren Orans (HQT-4,  
27       Document 3) that plots the differential against the cumulative number  
28       of off-peak hours for which there were no reservations.

29       **R4.2        Le Transporteur a produit à la Régie le bilan de la politique**  
30       **transitoire de rabais appliquée du 15 janvier 2003 au**  
31       **14 janvier 2004, notamment afin d'assembler et d'analyser des**  
32       **informations sur cette politique et d'évaluer si les objectifs**  
33       **formulés par la Régie dans sa décision D-2002-95 ont été**  
34       **atteints. Ainsi, la pièce HQT-2, Document 3, contient ce**

1            rapport. Le Transporteur y a colligé et analysé de façon  
2            concrète l'ensemble des informations pertinentes où des  
3            transactions ont effectivement eu lieu pendant la période  
4            d'application de la politique transitoire de rabais, sans égard  
5            aux informations ou périodes en dehors du périmètre  
6            d'analyse visé.

7

8            **Competitive Alternatives to HQT's Discounted Rates**

9            References: R-3549-2004 – Phase 2, HQT-2, Document 3, general  
10          Preamble: The Evaluation does not address the extent to which HQT's  
11          undiscounted and discounted rates are competitive with alternative  
12          transmission paths between Ontario and New England and Ontario and New  
13          York.

14          5.1 Please confirm that any party interested in taking advantage of  
15          arbitrage opportunities created by the price differentials between the  
16          Ontario and New England and the Ontario and New York markets will  
17          seek to minimize its transmission costs by utilizing the path that has  
18          available capacity with the lowest total transmission cost (taking into  
19          account losses as well as transmission rates).

20          **R5.1        Le Transporteur ne peut présumer des intentions des**  
21          **différents participants du marché, mais sous réserve de la**  
22          **disponibilité des capacités de transport sur les autres réseaux,**  
23          **il croit qu'il s'agirait là d'un comportement rationnel.**

24          5.2 Please provide details of the number of hours during which HQT had  
25          spare capacity, by period (Period 1, 2 and 3), during the year when  
26          the Provisional Discount Policy was in place.

27          **R5.2        Le tableau suivant présente la capacité disponible sur les**  
28          **interconnexions pour l'année 2003 en fonction du nombre**  
29          **d'heures.**

1 **Tableau R5.2 – Capacité sur les interconnexions**

Capacité (MW)	Période 1	Période 2	Période 3	Total
Moins de 2 000	2%	1%	1%	4%
2 000 à 2 999	16%	6%	2%	24%
3 000 à 3 999	30%	15%	10%	54%
4 000 et plus	8%	6%	3%	17%
<b>Total</b>	<b>56%</b>	<b>28%</b>	<b>16%</b>	<b>100%</b>

2

3 5.3 For the year when the Provisional Discount Policy was in place,  
4 please provide a table summarizing by Period (Period 1, 2 and 3) for  
5 Ontario to New England transactions:

- 6
- 7 • The relevant HQT rate,
  - 8 • The least cost transmission alternative,
  - 9 • The differential, and
  - 10 • The number of hours during which the prices and differential applied.

11 **R5.3 Pour toute cette période, le tarif de transport pour le service de**  
12 **transport de point à point non ferme horaire était de**  
13 **8,33 \$/MW/h pour la période 1 (en pointe) et de 6,25 \$/MW/h**  
14 **pour les périodes 2 et 3 (hors pointe). Les autres données**  
15 **demandées sont rendues publiques par l'Independent**  
16 **Electricity System Operator (IESO) pour l'Ontario et par le ISO**  
17 **New England (ISO-NE) pour la Nouvelle Angleterre.**

18 5.4 For the year when the Provisional Discount Policy was in place,  
19 please provide a table summarizing by Period (Period 1, 2 and 3) for  
20 Ontario to New York transactions:

- 21
- 22 • The relevant HQT rate,
  - 23 • The least cost transmission alternative,
  - 24 • The differential, and
  - 25 • The number of hours during which the prices and differential applied.

1    **R5.4**       **Pour toute cette période, le tarif de transport pour le service de**  
2                   **transport de point à point non ferme horaire était de**  
3                   **8,33 \$/MW/h pour la période 1 (en pointe) et de 6,25 \$/MW/h**  
4                   **pour les périodes 2 et 3 (hors pointe). Les autres données**  
5                   **demandées sont rendues publiques par l'Independent**  
6                   **Electricity System Operator (IESO) pour l'Ontario et par le New**  
7                   **York Independent System Operator (NYISO) pour l'État de New**  
8                   **York.**

9                                   **Objectives of transmission tariff design**

10          References: R-3549-2004 – Phase 2, HQT-4, Document 3, page 9

11                                   R-3401-98, HQT-10, Document 4, page 3

12          Preamble: Dr. Orans has filed evidence addressing the issue of transmission  
13          rate design in two proceedings before the Régie de l'énergie as cited above.

14          The lists of objectives of transmission tariff design appear to match except:

- 15          • the sixth objective in the current evidence (“to facilitate trading”) did not  
16                   appear in the R-3401-98 evidence, and
- 17          • the R-3401-98 evidence included “be consistent with the industry  
18                   standard” as an objective.

19          6.1 Please confirm that “be consistent with industry standards” continues  
20                   to be a relevant objective, as is implied by the inclusion of section 7  
21                   (Comparison: HQT’s Proposed OATT vs. Industry Standard Design)  
22                   in the current evidence.

23          **R6.1**       **Réponse du Dr Ren Orans :**

24                   **Yes, I continue to believe that adopting tariff and rate designs**  
25                   **that are consistent with the industry standards minimize**  
26                   **transaction costs and facilitate use, and are therefore an**  
27                   **important element of transmission rate design.**

28          6.2 Please provide details of the market developments (i) in Quebec and  
29                   (ii) in neighbouring jurisdictions, that have made it appropriate to add  
30                   “to facilitate trading” as one of “the major objectives of a transmission  
31                   tariff” when “considering transmission design choices faced by HQT”.



1           time, HQT was proposing a short-term rate design based on  
2           the AEP method, in which the hourly transmission rate for  
3           peak hours is equal to the annual rate divided by 4,160, while  
4           the hourly transmission rate for off-peak hours is equal to the  
5           annual rate divided by 8,760. This would have resulted in a  
6           relatively high hourly rate of about \$17.50/MWh during peak  
7           hours. In HQT's first rate design hearing, I testified that  
8           economic efficiency gains would result from HQT offering  
9           discounts from this high rate during hours with low trading  
10          margin.

11          However, the Regie rejected this rate design, and HQT's hourly  
12          rate for both peak and off-peak hours is now equal to the  
13          annual rate divided by 8,760. This lower rate of \$8.33/MWh  
14          blocks trades during only a very few hours, as demonstrated  
15          by both HQT and my own analysis. Hence, the economic  
16          gains to be realized from discounting from HQT's current  
17          hourly rate are considerably less than they would have been  
18          under HQT's previous proposed rate design.

19    7.2    Please confirm that a discretionary discount policy could be expected  
20           to have a greater benefit in terms of improving HQT's capacity  
21           utilization, with less revenue loss.

22    **R7.2        Réponse du Dr Ren Orans :**

23           Yes, I continue to believe that an entirely discretionary  
24           discount policy consistent with the FERC pro forma tariff  
25           would provide the greatest economic benefit with the least  
26           revenue loss, because the economic circumstances that can  
27           affect the value of HQT's short-term service are too complex to  
28           be accurately captured in a simple formula. However, absent

1           **having this broad discretion, HQT’s proposed index should**  
2           **provide incremental improvements during times when**  
3           **discounting is necessary to facilitate use.**

4   7.3 Please provide examples of discretionary discount policies utilized  
5       successfully in other jurisdictions.

6   **R7.3       Réponse du Dr Ren Orans :**

7           **Discretionary discount policies as a rule are not based on a**  
8           **transparent methodology that is fully reflected in a posted**  
9           **tariff or business practice. A successful discretionary**  
10          **discount relies on the judgement and experience of the senior**  
11          **staff responsible for determining the discount.**

12   7.4 Please confirm that a “flexible” discount policy that is similar to a  
13       discretionary discount policy but is fully transparent and is  
14       constrained by well-defined rules as to the circumstances in which a  
15       discount is available and the quantum of the discount under various  
16       circumstances could be expected to have benefits similar to those  
17       that are achievable with a discretionary discount policy.

18   **R7.4       Réponse du Dr Ren Orans :**

19          **I continue to believe that a truly discretionary discounting**  
20          **policy, that is, one that is unencumbered by rules and**  
21          **formulae that restrict the timing and magnitude of the**  
22          **discount, will provide the most benefits with the least revenue**  
23          **loss. However I also agree that a policy that offered flexibility**  
24          **within a defined set of boundaries would yield more benefit**  
25          **with less revenue loss than a fixed or formula-based discount.**

26                   **Competitive generation market in Québec**

27   Reference: R-3549-2004 – Phase 2, HQT-4, Document 3, page 11, lines 1-2  
28   Preamble: Dr. Orans states that “Pool designs are used in association with  
29   ISOs and RTO’s in Alberta, Ontario, California, Texas, Midwest, PJM, New  
30   York, and New England. Without exception, these jurisdictions have

1 competitive generation markets, which do not exist in Québec and other open  
2 access jurisdictions.”

3 8.1 Please confirm that a generation market can be competitive, even if it  
4 has an open access design, rather than a pool design.

5 **R8.1 Réponse du Dr Ren Orans :**

6 **It is possible to have a competitive generation market under an**  
7 **open access design. However, a jurisdiction with open access**  
8 **tariffs is typically served by one or more integrated utilities**  
9 **whose primary goal is to reliably serve the native loads. Even**  
10 **though wholesale trading occurs in an Open Access**  
11 **jurisdiction, it is at a much smaller scale than in a power pool,**  
12 **where load serving entities, which now own little or no**  
13 **generation, must transact and procure extensively in the**  
14 **wholesale market to meet their load obligations.**

15 8.2 Please identify any jurisdictions in North America that do not have  
16 pool designs but have at least some degree of competition in the  
17 generation market.

18 **R8.2 Réponse du Dr Ren Orans :**

19 **The Pacific Northwest, including British Columbia, is perhaps**  
20 **the best example of a relatively competitive generation market**  
21 **based predominantly on bilateral trading under Open Access**  
22 **transmission rate designs. Other examples include the desert**  
23 **Southwest and portions of the MAPP, MAIN and SPP regions.**

24 8.3 Please confirm that the Québec generation market already has some  
25 degree of competition and could be more competitive in the future,  
26 given that HQ Distribution utilizes a Request for Proposal process in  
27 contracting for new supply, and has recently been authorized by the  
28 Regie to contract for short term power either bilaterally without prior  
29 approval or by purchasing power on an energy exchange.

1 **R8.3 Réponse du Dr Ren Orans :**

2 **The Quebec generation market has a degree of competition**  
3 **now and has the potential to become more competitive in the**  
4 **future.**

5 8.4 Please confirm that the development of a competitive generation  
6 market in Québec is consistent with the policy of the Québec  
7 Government.

8 **R8.4 Le Transporteur ne peut présumer des intentions du**  
9 **gouvernement québécois à cet égard.**

10 **Facilitate trading**

11 Reference: R-3549-2004 – Phase 2, HQT-4, Document 3, page 12

12 Preamble: Dr. Orans states that HQT's OATT open access design "promotes  
13 energy trading by minimizing differences in tariff rules, access terms and  
14 conditions, and scheduling systems between a local jurisdiction and its  
15 neighbors".

16 9.1 Please list all neighbouring jurisdictions that have (i) open access  
17 designs and (ii) pool designs, as defined in the evidence.

18 **R9.1 Réponse du Dr Ren Orans :**

19 **Québec's immediate neighbours include Ontario (pool design),**  
20 **New York (pool design), New England (pool design) and New**  
21 **Brunswick (open access design). However, exports, imports**  
22 **and through transactions continue to be scheduled using**  
23 **open-access-type, short-term PTP service, even among the**  
24 **pool designs.**

25 9.2 For each neighbouring jurisdiction, please provide a comparison of (i)  
26 LT PTP rate design and rates, (ii) ST PTP rate design and rates, (iii)  
27 the rate design applicable to wheeling out and through, and (iv) the  
28 discount policy used.

29 **R9.2 Réponse du Dr Ren Orans :**

30 **Please refer to the following tables.**

1 **Table R9.2-1 – Long-term PTP service design**

Jurisdiction	Description
Ontario (Pool design)	Pool design where all loads pay uniform network service fees in \$/kW form. There is a separate export and through fee. Currently, there are no congestion charges for transmission usage within the province. The rates are as follows: 1) Network service rate: C\$2.83/kW-month 2) Line connection service rate: C\$0.82/kW-month 3) Transformation connection service rate: C\$1.50/kW-month
New Brunswick <sup>1</sup> (Open Access)	Standard 888 Design: - Yearly delivery: One-twelfth of the demand charge of C\$25,234.33/MW of Reserved Capacity per year.
New England (ISO-NE) (Pool design)	Pool design with load-based access fees to recover TRR and separate export fees. Zonal congestion management system with congestion charges for zone-to-zone transactions. LSEs purchase desired quantities of FTRs in annual auction, but are allocated load-ratio share of FTR auction revenues. Access fee varies depending on transmission owner.
New York (NYISO) (Pool design)	Pool design with load-based access fees to recover TRR and separate export and wheel through fees. Zonal congestion management system with congestion charges for zone-to-zone transactions. Seasonal auction for transmission rights available after accounting for committed uses. Access fee varies depending on transmission owner.

2 **Table 9.2-2 – Short-term PTP service design**

Jurisdiction	Description
Ontario (Pool design)	All loads pay separate network service fees in \$/kW form. There is no distinction between short- and long-term transmission usage fees.
New Brunswick (Open access)	Standard 888 Design: - Monthly delivery: C\$2102.86/MW of Reserved Capacity per month. - Weekly delivery: C\$485.28/MW of Reserved Capacity per week. - On-Peak Daily delivery: C\$97.06/MW of Reserved Capacity per day. - Off-Peak Daily delivery: C\$69.14/MW of Reserved Capacity per day. - On-Peak Hourly delivery: C\$6.23/MW-h Capped at daily - Off-Peak Hourly delivery: C\$2.96/MW-h Capped at daily
New England (ISO-NE) (Pool design)	Annual FTR auction for all transmission capacity based on single feasible dispatch. Existing rights-holders receive a share of auction revenue. Monthly auctions allow FTR holders to reconfigure their rights (to allow different PORs/PODs). FTRs can be resold in the secondary market.

<sup>1</sup> Energie NB Power currently has an application to revise their OATT. The information in these tables is based on their existing OATT.

Jurisdiction	Description
New York (NYISO) (Pool design)	Seasonal FTR auction for capacity available after accounting for committed uses. FTRs can be resold in the secondary market.

1 **Table 9.2-3 – Export and wheeling fees**

Jurisdiction	Description
Ontario (Pool design)	Separate export and through service with charge equal to \$1/MWh. Ontario auctions transmission rights on an annual and monthly basis to allocate uncommitted intertie capacity.
New Brunswick (Open access)	Standard 888 Design with no separate export and through service: <ul style="list-style-type: none"> <li>- Yearly delivery: One-twelfth of the demand charge of C\$25,234.33/MW of Reserved Capacity per year.</li> <li>- Monthly delivery: C\$2102.86/MW of Reserved Capacity per month.</li> <li>- Weekly delivery: C\$485.28/MW of Reserved Capacity per week.</li> <li>- On-Peak Daily delivery: C\$97.06/MW of Reserved Capacity per day.</li> <li>- Off-Peak Daily delivery: C\$69.14/MW of Reserved Capacity per day.</li> <li>- On-Peak Hourly delivery: C\$6.23/MW-h Capped at daily</li> <li>- Off-Peak Hourly delivery: C\$2.96/MW-h Capped at daily</li> </ul>
New England (ISO-NE) (Pool design)	Export charge per kW of reserved capacity based on the combined transmission facilities revenue requirement. Hourly rate is annual pool transmission rate (PTF) divided by 8760 (the number of hours in a year). Congestion charges may also apply to import and export schedules. Annual rate effective June 1, 2005, as revised August 31, 2005 : US\$20.32/kW-year.
New York (NYISO) (Pool design)	Export charge based on the scheduled amount of MWh in each hour for the month. Export charge varies depending on the transmission provider whose rate is applicable to the transmission customer.

2 **Table 9.2-4 – Posted discounting policy**

Jurisdiction	Description
Ontario (Pool design)	None.

Jurisdiction	Description
<p><b>New Brunswick (Open access)</b></p>	<p>« For any discount agreed upon for service on a path, from point(s) of receipt(s) to point(s) of delivery, the Transmission Provider must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System. Information regarding any firm transmission discounts must be posted on the OASIS. Any Transmission Provider initiated discount must only be offered over OASIS. Any Transmission Customer initiated discount must only be requested over OASIS. Once details of a negotiated discount have been finalized (price, Point of Receipt, Point of Delivery, length of service) they must be posted immediately on the OASIS. Discounts may be limited to particular time periods. Discounts must apply for the same time period and must be offered to all Transmission Customers. The Transmission Provider may discount only if necessary to increase usage of the transmission services. In addition, discounts to non-affiliates must be offered in a not unduly discriminatory manner. »</p>
<p><b>New England (ISO-NE) (Pool design)</b></p>	<p>« Three principal requirements apply to discounts for Through or Out Service as follows (1) any offer of a discount made by the PTOs must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from Point(s) of Receipt to Point(s) of Delivery, the PTO must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same Point(s) of Delivery on the PTF. »</p>
<p><b>New York (NYISO) (Pool design)</b></p>	<p>« Each Transmission Owner may advise the ISO of discounts to its TSC applicable during a specified period to all deliveries to a particular Interconnection between the NYCA and another Control Area. The ISO shall post the discounts on the OASIS for the specified period. Three principal requirements apply to discounts for Transmission Service as follows: (1) any offer of a discount made by a Transmission Owner must be announced to all Eligible Customers solely by posting on the OASIS; (2) any customer-initiated requests for discounts (including requests for use by a Transmission Owner's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS; and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount that the Transmission Owner agrees to and advises the ISO of, the same discounted Transmission Service rate will be offered to all Transmission Customers for the same period for all deliveries to a particular Interconnection between the NYCA and another Control Area. The ISO will post the discounts on the OASIS for the specified period. »</p>

1 **Discount Policy rate comparison**

2 Reference: R-3549-2004 – Phase 2, HQT-4, Document 3, pages 26 - 30,  
3 Section 4

4 Preamble: Dr. Orans refers to HQT's "Discounting Final Report", noting at  
5 page 26, lines 9-11 that "HQT's full non-discounted short-term point-to-point  
6 rates were reasonably low already and were not inhibiting substantial levels of  
7 trading and transmission use during the majority of the hours during the year."

8 10.1 Does the assertion that the rates are "reasonably low already" rely  
9 only on the comparison to the market price differentials that are  
10 contained in the HQT Report and in section 4.3 of Dr. Orans  
11 evidence. Please provide any comparisons with rates for similar  
12 services in other jurisdictions that were also relied on in making this  
13 statement.

14 **R10.1 Réponse du Dr Ren Orans :**

15 **The statement was in reference to Dr. Orans' analysis that**  
16 **shows that the current rate does not materially affect volume**  
17 **on HQT's system. HQT's rate for hourly firm service is**  
18 **reasonably low when compared to those of neighbouring**  
19 **jurisdictions, as can be seen in the following two tables.**

20 **The first table compares HQT's rate for hourly non-firm service**  
21 **with rates for hourly non-firm service by time-of-use period in**  
22 **Canadian provinces.**

1 **Table 10.1-1 – Hourly PTP rates in Canadian provinces (C\$)**

Rate	HQT (OATT as of April 2003)	BCTC (OATT consistent with June 23, 2005 Decision)	Manitoba (OATT as of 03/24/05)	New Brunswick (OATT as of 06/15/04)	Nova Scotia (OATT as of May 2004)
Hourly firm (on-peak or off- peak)	Not offered	Maximum Rate: 6.3 \$/MWh  Indexed rate	Not offered	Not offered	Not offered
Hourly non-firm	\$8.33/MW-h	Maximum Rate: 6.3 \$/MWh  Indexed Rate - \$1/MWh	On-peak: Capped at \$9.72/MW-h  Off-peak: Capped at \$4.616/MW-h	On-peak: Capped at daily \$6.23/MW-h  Off-peak: Capped at \$2.96/MW-h	On-peak: Capped at 9.94/MW-h  Off-peak: Capped at \$4.72/MW-h

2                   The second table shows the “wholesale transmission service  
3 charge” rates for New York utilities, which form the basis for  
4 NYISO’s through and out rates. HQT’s rate of approximately  
5 US \$7/MW/h is similar to many of the New York utilities.

1 **Table 10.1-2 – Wholesale transmission service charge rates (US\$)**

Utility	Wholesale Transmission Service Charge (US\$/MW/h)
Central Hudson Gas & Electric Corp.	\$3.7441
Consolidated Edison Co. of NY, Inc.	\$8.1405
LIPA	\$5.3063
New York Electric & Gas Corporation	\$6.4639
Niagara Mohawk Power Corporation (Settlement OA96-194-000)	\$4.59
Niagara Mohawk Power Corporation (Filed OA96-194-000)	\$4.22
Orange and Rockland Utilities, Inc.	\$6.1117
Rochester Gas and Electric Corporation	\$3.7860

2 New York ISO, FERC Electric Tariff, Attachment H, Sheet No. 404  
3 ([http://www.nyiso.com/public/webdocs/documents/tariffs/oatt/att\\_h.pdf](http://www.nyiso.com/public/webdocs/documents/tariffs/oatt/att_h.pdf))

4 10.2 Are HQT's non-discounted ST PTP rates "reasonably low already" in  
5 comparison to the rates for similar services in neighbouring  
6 jurisdictions that serve as competitive alternatives for some  
7 customers for the transmission of power from Ontario to New  
8 England and to New York? Please provide rate comparisons to  
9 support the response.

10 **R10.2 Réponse du Dr Ren Orans :**

11 **See response R10.1.**

12 **Percent of days blocked by short term transmission service rates**

13 Reference: R-3549-2004 – Phase 2, HQT-4, Document 3, page 28 - 30  
14 Preamble: Figure 2 in the evidence of Dr. Orans shows the percent of days in  
15 which trading is fully blocked by the short term hourly transmission service  
16 rates by comparing the highest on-peak hour price to the lowest off-peak hour  
17 price within a day.

18 11.1 Please confirm that Dr. Orans' analysis is only relevant for an entity  
19 such as HQ Production that has storage capabilities so that it can  
20 purchase power in one market during off-peak hours and sell it in  
21 another market during on-peak hours.

1    **R11.1    Réponse du Dr Ren Orans :**

2                    **Yes, my analysis is primarily relevant to HQ Production, which**  
3                    **accounts for approximately 80% of total short-term**  
4                    **transmission use on the HQT system; although Ontario’s**  
5                    **relatively low export fee means the analysis could also apply**  
6                    **to entities in that jurisdiction that also have storage capability.**  
7                    **My analysis supplements HQT’s earlier analysis that valued**  
8                    **HQT transmission based on the difference between the price**  
9                    **of energy purchased in Ontario and delivered in either New**  
10                   **York or New England (HQT-2, Document 3).**

11    11.2 Please confirm that when trading is not blocked based on this  
12                    analysis, the HQT system will be utilized for wheeling only if HQT  
13                    offers the lowest cost alternative for wheeling power between the  
14                    neighbouring jurisdictions and the discount is sufficient to allow  
15                    transmission customers to manage any other risks associated with  
16                    the wheeling transaction.

17    **R11.2    Réponse du Dr Ren Orans :**

18                    **Yes, it is reasonable to assume, for customers other than HQ**  
19                    **Production, that the HQT system will be utilized only to the**  
20                    **extent that HQT’s ST PTP rates are competitive with other**  
21                    **options available to potential shippers.**

22    11.3 Please confirm that utilization of the HQT system for trading could  
23                    result in improved capacity utilization if ST PTP service rates were  
24                    based on competitive considerations rather than maintaining a policy  
25                    of either fixed mandatory discounts or no discounts.

1 **R11.3 Réponse du Dr Ren Orans :**

2 **Yes, I continue to believe that a discounting policy that allows**  
3 **flexibility to consider competitive conditions in neighbouring**  
4 **jurisdictions, in addition to a number of other factors, would**  
5 **improve utilization relative to either no discounts or fixed**  
6 **mandatory discounts, while reducing revenue loss.**

7 **BC Hydro Short-term rate design**

8 Reference: R-3549-2004 – Phase 2, HQT-4, Document 3, page 38 – 40,  
9 section 7.2.3

10 Preamble: The evidence of Dr. Orans discusses BCTC's proposed ST-PTP  
11 rate noting that it "is set at the minimum of a) the full non-discounted hourly  
12 rate; or, b) 1/4 of an estimated value of transmission between Alberta and the  
13 California Oregon border (COB)." (page 39, lines 7 – 9)

14 The evidence also states that: "HQT's Discounting Final Report indicates a  
15 \$15/MW-h transmission value based on the average price difference between  
16 markets outside the province." (page 39, line 23 to page 40, line 1)

17 12.1 Please explain the methodology used by BCTC to determine the  
18 "value of transmission between Alberta and the California Oregon  
19 border (COB)."

20 **R12.1 Réponse du Dr Ren Orans :**

21 **The ST PTP formula under the WTS calculated a rate equal to**  
22 **one quarter of the gains from trade, where the gain from trade**  
23 **was estimated as the difference between the estimated cost of**  
24 **electricity in Alberta and posted prices at the California-**  
25 **Oregon Border. The cost of electricity in Alberta was estimated**  
26 **using the cost of natural gas at Encana's Calgary Hub**  
27 **converted to electricity (Exhibit B1-1, pp. 60-61)." (BCUC's**  
28 **June 20, 2005 Decision, p.63).**

29 **The formula divides the hypothetical gain from trade equally**  
30 **among a buyer and a seller of a power transaction and the two**

1 transmission providers whose services are used by the  
2 transaction. BCTC's new formula which has been approved by  
3 the BCUC but not yet implemented, substitutes the index price  
4 at Mid-Columbia for the index price at COB, and the Alberta  
5 Electric System Operator hourly electricity price for the gas-  
6 based proxy.

7 12.2 Please explain the method used to derive the \$15/MW-h average  
8 from data in HQT's Discounting Final Report. Does it take into  
9 account the price differential in periods when there were no  
10 reservations and is it weighted on the basis of the reservations with  
11 discounts in the relevant hours?

12 **R12.2 La valeur de 15 \$/MW/h est établie à partir des écarts de prix**  
13 **présentés à la pièce HQT-2, Document 3, page 15, Tableau 4 et**  
14 **page 16, Tableau 5. Il en ressort que l'écart est généralement**  
15 **d'au moins 15 \$/MW/h.**

16 **Tel qu'il appert des tableaux précités, l'établissement des**  
17 **écarts de prix porte sur les transactions où il y avait un rabais**  
18 **dans le cadre de la politique transitoire de rabais. Ces écarts**  
19 **de prix ont été pondérés en fonction des réservations avec**  
20 **rabais aux heures correspondantes (pour que les prix des**  
21 **réservations plus élevées prennent plus de poids que les prix**  
22 **des réservations moindres, permettant ainsi une meilleure**  
23 **comparaison). Voir également réponse à la question 3.2.**