

**DEMANDE DE RENSEIGNEMENTS N° 1 D'OPTION CONSOMMATEURS (« OC »)
À HYDRO-QUÉBEC DISTRIBUTION (« HQD »)**

**DEMANDE DU DISTRIBUTEUR RELATIVE À L'ÉTABLISSEMENT DES TARIFS
D'ÉLECTRICITÉ POUR L'ANNÉE TARIFAIRE 2008-2009**

R-3644-2007

1. Reference: HQD-1, Document 1, page 6, lines 9-17

Question:

- a) Please describe why HQD considers the deployment of the SIC project to be of important concern to low-income customers (relative to its other customers).

2. Reference: HQD-1, Document 1, page 9, lines 3-15

Questions:

- a) Is it fair to conclude that HQD believes \$107 M is the appropriate level of recovery for the 2005-2006 Transmission Account because it:
- Addresses intergenerational equity by employing a faster rate of recovery than the equal amortization over three years proposed in R-3610-2006 but subsequently rejected by the Régie, and
 - Addresses rate stability as the resulting overall rate increase is less than 3%?

3. Reference: HQD-1, Document 1, page 10, line 19 to page 11, line 8

Question:

- a) Is the \$40 M in savings already captured in the operating costs presented for 2008?

**4. References: HQD-2, Document 1, page 5, Table 1
HQD-2, Document 1, page 8, lines 19-25 and page 9, lines 1-10**

Questions:

- a) Please confirm that the 2007 sales reported in Table 1 are based on actual sales for the first 4 months of 2007 (i.e., with no weather normalization adjustments).
- b) Please redo Table 1, where all months of 2007 are based on HQD's **current** weather normalization methodology.

- c) Please redo Table 1, where all months of 2007 are based on HQD's **proposed** weather normalization methodology.

5. Reference: HQD-2, Document 1, page 10, Table 3

Questions:

- a) Please indicate if the weather normalized values reported in Table 3 for 2005 and 2006 are based on HQD's current or its proposed weather normalization methodology.
- b) Depending on the answer to part (a), please redo Table 3 and include for 2005 and 2006 columns that report each year's sales by customer class:
- Weather normalized using HQD's proposed (new) weather normalization methodology; or
 - Weather normalized using HQD's existing weather normalization methodology.

**6. References: HQD-2, Document 1, page 5, Table 1
HQD-2, Document 1, page 21 Table 9
HQD-1, Document 1, page 14, Table 3**

Questions:

- a) Please redo Table 3 assuming the load forecast is based on HQD's current (existing) weather normalization methodology.
- b) Based on the results of part (a), does the change in weather normalization methodology lead to a higher or lower rate increase for April 1, 2008 than if the weather normalization methodology had not been changed?

7. Reference: HQD-2, Document 1, page 21, lines 9-16

Questions:

- a) Please provide a breakdown of the cumulative energy savings for 2008 (i.e., 2,772 GWh) by customer class (based on the customers classes set out in HQD-2, Doc. 1, Table 1).
- b) What is the difference between "GWh mensualisés cumulés" (2,398 GWh) and "GWh ajoutés cumulés" (2,772 GWh)?

8. Reference: HQD-2, Document 2, page 7, lines 4-5 and page 8, Table 1

Question:

- a) Please reconcile the statement on page 7 that 2006 post-heritage needs were only 0.9 TWh with the post-heritage need of 2.9 TWh reported in Table 1.

9. Reference: HQD-2, Document 2, page 10, Footnote

Question:

- a) Please explain more fully why it is necessary to add the cost of wind power integration and the framework agreement to the DAM price in order to make the comparison comparable.

10. Reference: HQD-2, Document 2, page 15, Table 5 and page 16, lines 13-18

Questions:

- a) Please provide the details underlying the projected \$29.3 M in network transmission costs for resale in 2007 (e.g., types of Transmission service used, assumed contract quantities, and transmission rates).
- b) With respect to the Capacity Purchases shown in Table 5, how many MWs were purchased each month in 2007 and what is the projected average cost per kW/month for 2007 capacity purchases? Do these capacity purchases represent the “interruptible option” or do they also include actual purchases from neighbouring markets?

11. Reference: HQD-2, Document 2, page 16, lines 10-12

Questions:

- a) Why is a reduction in acquired energy from HQP’s cyclable contract considered a “last recourse”?
- b) Are the economics of resale better than those associated with reducing purchases from HQP and, if so, by how much?

12. Reference: HQD-2, Document 2, page 20, Table 7 and page 23, Table 9

Questions:

- a) With respect to Table 7, please provide a schedule that shows the amount of each supply source (and resale) on a month-by-month basis.

- b) With respect to Table 9, please provide a schedule that (to the extent possible given confidentiality considerations) breaks down the long-term contract total and shows the values by individual contracts.
- c) With respect to the response to part (b), please provide a schedule that shows the cost of each supply source (and resale) on a month-by-month basis.

- 13. References:** (i) HQD-2, Document 2, page 20, line 4 to page 21, line 4
(ii) HQD-2, Document 2, page 23, Table 9
(iii) HQD-7, Document 2, page 7

Question:

- a) With respect to reference (i), does this mean that HQD is assuming, for purposes of the Application, that its resale price will be \$3/MWh (US) less than the NY market price for Zone M?
- b) With respect to reference (ii) and for purposes of its current Application, what is HQD assuming will be the average cost of energy on the DAM – Zone M in 2008?
- c) Please provide the details underlying the projected \$31.8 M in transmission costs for resale in 2008 (e.g., types of Transmission service used, assumed contract quantities, and transmission rates).

- 14. References:** (i) HQD-2, Document 2, page 23, Table 9
(ii) HQD-7, Document 2, page 5

Question:

- a) Reference (i) reports 6,492 GWh of post-heritage supply for 2008. However, reference (ii) appears to report 6,039 (i.e., 6,034 + 5) GWh. Please confirm if the difference is solely due to losses.

- 15. References:** (i) HQD-3, Document 1, pages 5 to 7
(ii) R-3610-2006, HQD-3, Document 1, page 19, Table 5

Preamble:

With regards to reference (i), page 7 (lines 1-7), HQD proposes to include Remote Communities costs to two (2) sets of indicators: CEN par abonnement and Coût total par abonnement. For the purpose of our questions, this proposal is labeled “Proposal A”. With regards to reference (i), page 7 (lines 8-9), HQD proposes to withdraw Net Benefit from one (1) set of indicators: Coût total par abonnement. For the purpose of our questions, this proposal is labeled “Proposal B”.

Questions:

- a) Confirm that the six indicators referred to in reference (i), page 5 (lines 9-10), are the ones found in reference (ii).
- b) Please indicate which of the 8 indicators in Table 1 are impacted by Proposal A.
- c) Please indicate which of the 8 indicators in Table 1 are impacted by Proposal B.
- d) With respect to both proposals, provide a Table listing values for each year between 2003 to 2008 that will distinguish the impact of each proposal on the concerned indicators. That is, if:
 - No changes were proposed;
 - With Remote Communities and with Net Benefit; and
 - With Remote Communities but without Net Benefit.

- 16. References: (i) HQD-3, Document 1, page 5, lines 17-23**
(ii) HQD-7, Document 9, page 5

Preamble:

In reference (i), HQD introduces the CIM indicator in replacement of the IEN indicator. The former's numerator consists of financial costs, amortization costs and capital tax. In reference (ii), HQD indicates that adjustment to capital tax rate from 2007 to 2008 resulted in \$11.1 M cost reduction. It is expected that the capital tax will be eliminated by 2011 and we take for granted that rate is to decline over the intervening years.

Questions:

- a) With regards to capital tax, would the anticipated rate reduction suggest, all other things being equal, an improved performance without HQD being more efficient? Please elaborate.
- b) Please provide values for CIM par abonnement for each year between 2003-2008:
 - Using the 2005 capital tax rate;
 - Using the 2008 capital tax rate.
- c) In future Applications, would HQD consider providing CIM values as proposed, as well as either:
 - An "adjusted" CIM that would instead use the 2005 capital tax rate; or
 - A CIM value excluding capital tax?Please elaborate on your answer.

- 17. References:** (i) HQD-3, Document 1, page 8, Table 1
(ii) HQD-3, Document 1, Annex 2, page 41
(iii) HQD-11, Document 3, page 9

Questions:

- a) Confirm that values in Table 1 for all years shown are derived based on the changes indicated on pages 5 to 7 of HQD-3, Document 1 and therefore are determined on a consistent basis. If not, why not?
- b) Are the 2007 values reported in Table 1 (reference i) based on:
 - The amounts authorized in D-2007-12; or
 - HQD's current forecast for 2007?
- c) If Table 1 is based on amounts authorized in D-2007-12, please provide a revised table based on the current forecast for 2007.
- d) With reference to the values presented in reference (iii) for Distribution and Customer Service, please provide a schedule that sets out the derivation of the values reported in Annex 2 (reference ii) for:
 - Coût total du processus SALC (\$453 M);
 - Coût total du processus Distribution (\$1,693 M); and
 - Coût total du processus Distribution et SALC (\$2,202 M).
- e) With reference to Annex 2 (reference ii), please explain why the sum of the Coût total du processus SALC and the Coût total du processus Distribution (i.e., \$1,693 M + \$453 M) does not equal the Coût total du processus Distribution et SALC (\$2,202 M).
- f) With reference to Annex 2 (reference ii), please provide a schedule that sets out the major factors contributing to the 9.8% increase in 2008 (over 2007) for the Coût total du processus SALC and how much each factor contributed to the \$41 M (\$453 M - \$412 M) increase.

- 18. References:** HQD-3, Document 1, page 9, lines 6-10
HQD-3, Doc. 1, p. 20, lines 9-11

Question:

- a) In what areas of its operation does HQD anticipate it will derive efficiency improvements/benefits from the SIC project?

- 19. References: (i) HQD-3, Document 1, page 10, Table 2
(ii) HQD-3, Document 1, Annex 4, p. 49**

Questions:

- a) Does HQD know what areas/aspects of its operation and performance contribute to a customer satisfaction that is less than 7.5 for residential and business/commercial customers? Please elaborate.
- b) What specific initiatives has HQD undertaken in 2006 and 2007 or plans to undertake in 2008 to improve residential and business/commercial customer satisfaction in these areas?
- c) With respect to reference (ii), please provide values used to derive results in Table 2 (reference i), per customer segment (i.e., residential segment and business/commercial segment).

- 20. References: HQD-3, Document 1, pages 10-11
R-3610-2006, HQD-7, Document 3, page 15**

Questions:

- a) Please provide values for "IC-végétation" for each year from 2001 to 2007 (year to date).
- b) Please elaborate on the ten (10) climatic events referred to on page 11 (lines 13-16) and indicate the number of major event days (i.e., "journées d'événements majeurs") associated with each.

- 21. References: (i) HQD-3, Document 1, pages 17-21
(ii) R-3610-2006, HQD-3, Document 1, pages 28-31**

Questions:

- a) With respect to reference (i), page 18 (line 18), please indicate what RVI stand for.
- b) With respect to reference (i), page 20 (lines 19-24) and reference (ii), please indicate which activities have yielded results and which have not.

- 22. References: (i) HQD-3, Document 1, page 27, Table 6
(ii) HQD-3, Document 1, page 8, Table 1
(iii) HQD-3, Document 1, Annex 2, page 41**

Questions:

- a) With respect to reference (i), please provide the distribution cost and customer count data for 2004 and 2005 used to create Table 6.
- b) Please describe the difference between the definition of distribution cost data used for purposes of creating Table 6 and the distribution cost data used in creating Table 1 (as reported in Annex 2).

- 23. References: HQD-3, Document 2, pages 7-8
R-3610-2006, HQD-20, Document 1, page 9**

Question:

- a) Are the 2007 “Année de base” costs per customer reported in Table 1 (page 7) based on the current forecast for 2007?
- b) Please confirm that the source of the 2007 authorized amounts for Shared Services set out in Table 1 is R-3610-2006, HQD-20, doc. 1, page 9?

- 24. References: HQD-3, Document 2, page 9, lines 9-10
HQD-7, Document 6, page 5, lines 16-18**

Question:

- a) The application states that the SIC project principally accounts for the increase in shared service costs between 2007 (Autorisé) and 2008. Please explain why and by how much the SIC project impacts on each of the components of Shared Services’ costs for 2008.

- 25. Reference: HQD-4, Document 2, page 10, lines 9-22**

Preamble:

HQD states that the weather variances in GWh cancel themselves out over a period of time.

Questions:

- a) Please confirm that this is only correct if the weather normalization methodology by customer class adopted by HQD is correct. If not, why not?

- b) Please confirm that, to the extent the weather normalization is an approximation or perhaps even bias, the balancing account for Transmission and Distribution revenues may not balance out over time. If not, why not?

26. Reference: HQD-4, Document 2, pages 15-18

Preamble:

On pages 15-17, HQD discusses three alternative approaches to managing the refund/recovery of Pass-On Account balances. Then, starting at the bottom of page 17, HQD presents its recommended approach.

Questions:

- a) Is it fair to say that under HQD recommended approach, initial consideration would be given to refunding/recovery the entire Pass-On Account balance (in the interest of inter-generational equity) and then the need for flexibility (in terms of potentially deferring part of the refund/recovery to subsequent rate years) would be introduced and considered based on rate stability (impact) considerations?
- b) If not, please explain how HQD's recommended approach would differ from that outlined in part (a).
- c) Please confirm that HQD's recommended approach is similar to the third alternative presented starting at line 24 on page 16. If it is not, please explain the differences.
- d) Please confirm that HQD's recommended approach is discretionary in that decisions on refund/recovery of the Pass-On Account would be made on a case-by-case basis.
- e) Please confirm that under HQD's recommended approach, the question of how to eventually refund/recover any Pass-On Account balances that are not included in the test year's rates is something that the Régie would also decide on a case-by-case basis.

27. Reference: HQD-4, Document 2, pages 19-20

Questions:

- a) Please explain more fully what the billed/delivered adjustments are meant to capture and why they arise.
- b) Please explain why the first adjustment (i.e., for January to June) can be calculated less than 6 months later (i.e., by year end) but the second adjustment cannot be calculated until 12 months later (i.e., the adjustment for July to December is not calculated until towards the end of the following year).

- c) Please confirm that the first adjustment is included in the actual financial results for HQD for the year concerned (e.g., the adjustment for January to June 2005 were reflected in HQD's actual financial results for 2005). If this is not the case, please explain how the first adjustment is reflected in HQD's reported revenues and costs.
- d) Please confirm that the first adjustment is included in the Pass-On Account balance for that year, as calculated for the rate application for the second subsequent year (e.g., the first adjustment for 2005 was included in the 2005 Pass-On Account values calculated for the application for 2007 rates).
- e) How is the second adjustment incorporated into HQD's reported financial results, e.g., would the adjustment for July to December 2005 lead to:
 - A restatement of HQD's 2005 sales volumes, revenues and costs, or
 - Is it captured in the sales volumes, revenues and costs for 2006?
- f) With respect to the response to part (e), if the second adjustment does not result in a restatement of HQD's volumes, revenue and costs for the year concerned, why is it appropriate to recalculate the Pass-On Account balance for the year?
- g) Please provide the details supporting the calculation of the Pass-On Account balance for 2005 (e.g., the equivalent of HQD-4, Document 2, page 26, Table 3) based on:
 - The 2005 Pass-On Account balance calculation as submitted in R-3610-2006, and
 - The 2005 Pass-On Account balance calculation as currently filed in HQD-4, Document 1, Table 2, Columns 1-5.

28. Reference: HQD-4, Document 2, pages 20-22

Questions:

- a) Please confirm that variations (from forecast) in volumes sold will also lead to over or under recovery of planned Pass-On Account refund/recovery (i.e., if 2007 volumes are less than forecast the refund of pass-on account balances for 2006 will be less than planned).
- b) How is the variation in actual Pass-On Account refund/recovery accounted for in the determination of subsequent outstanding Pass-On Account balances?

29. Reference: HQD-4, Document 2, pages 23-24

Questions:

- a) Please provide a schedule setting out the derivation of the \$1.1 M deferral balance relating to December 2006. In doing so, please indicate:
 - The fixed and variable credits for the interruptible option that were included in 2006 rates,

- The calculation of the actual fixed and variable credits paid out for 2006.
- b) Please provide a schedule setting out the derivation of the \$3.0 M deferral balance relating to 2007. In doing so, please indicate:
 - The fixed and variable credits for the interruptible option that were included in 2007 rates,
 - The calculation of the actual fixed and variable credits paid out for 2007.
- c) If HQD continued to use the approach requested in R-3603-2006, over what period would the deviation in fixed and variable credits related to interruptible power be determined for purposes of calculating the deferral account balance for the interruptible power option (e.g., would it be the estimated differences up to March 2007 or March 2008)?

30. Reference: HQD-4, Document 2, pages 24-25

Questions:

- a) Why is the entire \$4.2 M treated as supply costs for 2007 (see Tables 5 and 6) when \$1.1 M is associated with the cost of the interruptible option (and therefore supply) for 2006?
- b) In principle would it not be more appropriate to determine the allocation of the interruptible deferral account to rate classes by:
 - Treating the \$1.1 M (plus interest) as a price effect for 2006, and
 - Treating the \$3.0 M as a price effect for 2007.If not, why not?

31. Reference: HQD-4, Document 2, pages 26-28

Question:

- a) Please provide the details supporting the calculation of the Pass-On Account balance for 2006 presented in Column 2 of Table 4 (i.e., details equivalent to HQD-4, Document 2, page 26, Table 3).

32. Reference: HQD-4, Document 2, pages 28-31

Questions:

- a) Tables 5 and 6 show that there is \$2.8 M in 2007 Pass-On Account Recoveries and \$0.7 M in Interruptible Option deferral account recoveries associated with Special Contracts. Are these amounts recoverable from the Producer (i.e., HQP)? If not, why not?
- b) Table 6 shows a total Interruptible Option cost (for all customers including Special Contracts) of \$4.9 M. However, the total amount in the interruptible option deferral account is only \$4.2 M (see HQD-9, Document 1, page 17). Please reconcile.

33. Reference: HQD-4, Document 3, page 10, lines 15-20

Question:

- a) Please confirm variances in HQT's point to point revenues posted in HQD's Transmission Deferral account will not attract interest until after December 31st of the year to which the variances are attributed.

**34. References: HQD-7, Document 2, page 3, lines 1-7 and page 5
HQD-2, Document 2, page 7, lines 13-15**

Question:

- a) Please confirm that, since losses are the same for 2006 and 2008 (i.e., 7.5%), the reason why the volume of heritage pool consumption changes as between 2006 and 2008 (per HQD-7, Document 2, page 5) is due entirely to the 1.9 TWh of unused heritage pool in 2006.

35. Reference: HQD-7, Document 2, page 5 and page 8, lines 8-16

Question:

- a) Why has the "adjustment for special contracts" increased from \$33.4 M and \$25.1 M in 2006 and 2007 respectively to \$118.8 M in 2008?

36. Reference: HQD-7, Document 3, pages 4-5

Question:

- a) Please provide a schedule showing the impact of the 2007 and 2008 expenditures on specific programs (per Table 2) on the individual elements of Charges d'exploitation set out in Table 1 (i.e., for 2007 and 2008 show the breakdown of the \$129 M and \$144.6 M respectively by individual Charges d'exploitation element).

37. Reference: HQD-7, Document 3, page 7

Questions:

- a) Please explain the basis and, if taken from past HQD filings or Régie decisions, provide the specific sources of the 2007 values for the cost elements shown in Table 3 based on D-2007-12.
- b) What is the current projection for 2007 spending on each of the specific cost elements shown in Table 3?

38. Reference: R-3610-2006, HQD-7, Document 3, pages 10-21

Questions:

- a) Please provide a schedule that compares:
 - The 2007 spending levels proposed in HQD's R-3610-2006 Application for each of the specific elements discussed on pages 10-21, with
 - The current projected 2007 spending on each of these elements.
- b) With respect to part (a), please explain any variances that exceed 5%.

39. Reference: HQD-7, Document 3, page 8

Question:

- a) Please provide a schedule setting out the spending on vegetation management:
 - Actual level for 2006
 - Current projected level for 2007.

**40. References: HQD-7, Document 3, page 9
HQD-7, Document 3, page 4, Table 1**

Question:

- a) Please provide a schedule that for 2007 (current projection) and 2008 (proposed) sets out the contribution of the SIC project to each of the cost elements in Table 1.

**41. References: HQD-7, Document 4, pages 14 and 28
R-3610-2006, HQD-7, Document 4, page 18, lines 18-19**

Question:

- a) How much of the "régime d'intéressement corporatif" for 2006, 2007 and 2008 is linked to the additional bonus of 1.5% that is linked to the attainment of the net profit targeted by Hydro-Québec?

42. Reference: HQD-7, Document 4, page 18, Table 9

Question:

- a) What is the 2007 Cost of Distribution and Customer Services/Customer (as defined for purposes of Category C) based on:
 - HQD's R-3610-2007 Application, and
 - Decision D-2007-12?

43. Reference: HQD-7, Document 5, page 3 and page 4 (lines 1-2)

Question:

- a) Please explain the basis and, if taken from past HQD filings or Régie decisions, provide the specific sources of the 2007 value of \$48.6 M for spending on vegetation management that HQD indicates as authorized for 2007.

44. Reference: HQD-7, Document 5, page 3

Question:

- a) Please explain the basis and, if taken from past HQD filings or Régie decisions, provide the specific sources of the 2007 value of \$8.6 M for spending associated with unplanned events that HQD indicates as authorized for 2007.
- b) With what activities/requirements is the 2007 projected Unforeseen Spending of \$ 8 M attributable to?

45. Reference: HQD-7, Document 8, page 4

Question:

- a) Are the 2007 values presented in the Table HQ's current projection of Corporate costs for the year?
- b) Please explain the increase in corporate cost for 2007 as between R-3610-2006 (HQD-7, Document 8, page 4) and the current Application for Affaires corporatives et Secrétariat général (\$75.8 M to \$81.3 M).
- c) Please explain the following increases in HQ's corporate costs as between 2006 and 2008:
 - Finances (45%);
 - Bureaux PDG, PCA, Protectrice de la personne (27%).

46. Reference: HQD-7, Documents 9, pages 6 and 10

Question:

- a) Please indicate how many million litres of gasoline, diesel, heating oil and/or propane HQD's operations required for 2006.

47. Reference: HQD-9 Document 1, page 7

Questions:

- a) With respect to the Commercial Programs account, please provide a continuity schedule from December 2006 to December 2008 that shows for 2007 and 2008:
 - Annual depreciation,
 - Any additions,
 - Opening and closing balances.
- b) Please explain any additions to the account.

48. Reference: HQD-9 Document 1, pages 8-9

Questions:

- a) With respect to the PGEE account, please provide a continuity schedule from December 2006 to December 2008 that shows for 2007 and 2008:
 - Annual depreciation,
 - Any additions,
 - Opening and closing balances.
- b) When are the energy savings from the PAMUGE program expected to start to materialize?

49. Reference: HQD-9, Document 1, page 9, lines 17-22

Question:

- a) Why is interest on 2007 deferred amount (\$56.7 M) calculated from April 1, 2007?

50. Reference: HQD-9, Document 1, pages 13-15

Questions:

- a) Please provide schedule that sets out the derivation of the \$117.8 M recorded in the Temperature Variation Averaging account for 2006 (prior to interest).
- b) Why is interest charged on this account during the year the difference is incurred, when interest on the Pass-On Account or the interruptible option account is not charged until after December of the year the differences are incurred?

51. Reference: HQD-9, Document 1, pages 6 and 17

Question:

- a) With respect to the Transmission contributions (Contributions à des Projets Raccordement), please provide a continuity schedule from December 2006 to December 2008 that shows for 2007 and 2008:
- Annual amortization,
 - Any additions,
 - Opening and closing balances.

52. Reference: HQD-9, Document 1, pages 6 and 18

Questions:

- a) With respect to Development Charges (Frais de Développement), please provide a continuity schedule from December 2006 to December 2008 that shows for 2007 and 2008:
- Annual amortization,
 - Any additions,
 - Opening and closing balances.
- b) With respect to the Maintenance Charges for Private Switchyards, please provide a continuity schedule from December 2006 to December 2008 that shows for 2007 and 2008:
- Annual amortization,
 - Any additions,
 - Opening and closing balances.
- c) With respect to the Maintenance Charges for Private Switchyards, please explain more fully why this cost is incurred.

**53. References: HQD-9, Document 1, page 11, lines 2-3 and page 13
HQD 2006 Annual Report, HQD-4, Document 3, page 7**

Question:

- a) Why is interest calculated in 2005 (\$1.9 M) for the 2005 Pass-On Account? It is noted that for the 2006 and 2007 Pass-On Accounts, interest is not calculated prior to January 1 of the following year.

**54. References: HQD-11, Document 1, page 9, lines 1-6
HQD-11, Document 3, Table 25C (page 40)
HQD-14, Document 3, Annex B, pages 12-13**

Questions:

- a) With reference to Annex B, please confirm that the “cout évité de fourniture/transport” captures both Production and Transmission related activities/assets.
- b) With respect to the avoided costs used in HQD-11, Document 3, Table 25C (column 2), please break the cost of supply (i.e., “fourniture”) as between Production and Transmission.
- c) With reference to Annex B, please confirm that the Transmission related activities/assets captured by the “coût du transport/charge locale” are all provided by HQT. If this is not the case, please indicate what facilities/activities provided by HQD are captured in this avoided cost.
- d) With reference to Annex B, please explain what distribution related activities/assets are captured by the “coût du transport/charge locale”, if any?
- e) With reference to Annex B, why are there no “transport/charge locale” savings associated with Tariff L customers?
- f) Annex B only contains avoided costs for Tariff D, Tariff G, Tariff M and Tariff L customers. Please explain where/how the avoided cost for the other customers classes presented in Table 25C were obtained.
- g) Do Remote Communities (Réseaux Autonomes) require distribution facilities? If so, why are there no distribution avoided costs associated with PGEE in Remote Communities?
- h) Are the avoided costs set out in Annex B calculated based on customer usage at the point of delivery to the customer or are they based on usage measured at some other point on the system?

**55. Reference: HQD-11, Document 1, page 9, lines 15-22
HQD-11, Document 3, Table 25C (page 40)
HQD-14, Document 3, Annex A, page 8**

Questions:

- a) Are the cumulative GWh savings reported for each customer class (in Annex A) based on usage at the point of delivery to the customer? If not, what is the point of measurement for the savings?

- b) Why are the cumulative results up to 2007 used in the allocation as opposed to the cumulative results anticipated up to the end of 2008?
- c) How were the cumulative results allocated to sub-classes within each major customer classification (e.g., How were the 1,011 GWh of cumulative savings for residential allocated to the various residential sub-classes)?

- 56. Reference:** (i) **HQD-11, Document 1, page 8, line 16 to page 9, line 22 and page 10, line 25 to page 11, line 2**
(ii) **HQD-11, Document 3, Table 25C**
(iii) **HQD-1, Document 1, page 12, lines 14-20**

Questions:

- a) Please confirm that one of the main reasons (per pages 10-11) for HQD undertaking PGEE programs is that they are a cost effective alternative to:
 - Acquiring additional post-heritage pool supply,
 - Purchasing additional transmission service from HQT, and
 - Installing additional distribution facilities.
- b) Based on cumulative savings to 2007 reported in Table 25C and HQD's current avoided costs, what are the total costs HQD has avoided in 2008 that are associated with:
 - Supply,
 - Transmission,
 - Transmission/Native Load,
 - Distribution.

Please provide a schedule showing the details of the calculations.

- 57. References:** **HQD-11, Document 1, page 12, lines 5-10**
R-3610-2006, D-2007-12, page 77
HQD-11, Document 3, pages 18-19

Questions:

- a) Is it HQD's view that the Régie directed HQD for its 2008 Rate Application:
 - To base the cost allocation treatment of transmission costs on D-2006-66 or
 - To include (as a potential alternative to 1CP) an allocation of transmission cost based on D-2006-66?
- b) Please redo HQD-11, Document 3, Tables 9D and 9E, using the 1CP method to:
 - Allocate the costs in columns 2, 3 & 4 of Table 9D,
 - Allocate the costs in column 2 of Table 9E.

**58. References: R-3640-2007, HQT-12, Document 2, page 23
HQD-11, Document 3, page 17**

Question:

- a) How is the portion of power-related costs attributed to Native Load (\$1492.8M) by HQT assigned to the functions HQD employs (i.e., Equipment Associated with Production, Network and Interconnections)?

59. Reference: HQD-11, Document 1, page 13, line 23 to page 14, line 23

Questions:

- a) Since transmission costs for 2005-2007 were allocated to customer classes using ICP, why is it not appropriate to allocate the recovery of deferral account amounts associated with those years to customer classes on the basis of ICP?
- b) With respect to the connection projects, please describe more fully how the contribution associated with each project was assigned to the three transmission-related functions (i.e., Equipment Associated with Production, Network and Stations). In doing so, please illustrate using Waskaganish as the example.
- c) For the Waskaganish project what was the basis for the power/energy split for the costs attributed to Equipment Associated with Production?

**60. References: HQD-11, Document 1, page 15, lines 1-8
HQD-11, Document 3, pages 47-48**

Question:

- a) What are the 2008 dollar impacts associated with the Schefferville Project for Tables 30 and 31? Please confirm that for both tables the impact is with respect to Column (2).

**61. References: HQD-11, Document 1, page 15, lines 9-14
HQD-11, Document 3, page 42**

Question:

- a) Is the calculation of how the Temperature Averaging Account is allocated to customer classes published by HQD? If so, please provide the relevant web-link. If not, please provide a copy.

- 62. Reference: HQD-11, Document 1, page 15, lines 15-21
HQD-11, Document 3, pages 8, 55 and 59**

Question:

- a) Are Development Costs split between connections, low voltage, medium voltage using underground values reported in Tables 35 and 37 of HQD-11, Document 3 for underground facilities? Please provide a schedule showing how the development costs are split between functions and the sources of the assignment factors.

- 63. References: HQD-11, Document 1, pages 15-16
HQD-11, Document 3, pages 18-19
HQD-9, Document 1, page 18**

Question:

- a) HQD-11, Document 1 does not appear to discuss the allocation methodology with regards to costs for deferral account associated with Maintenance Charges for Private Switchyards. What is the rationale for the allocation as set out in Tables 9D and 9E of HQD-11, Document 3?

- 64. Reference: HQD-11, Document 1, page 16, lines 10-16**

Question:

- a) Please provide the details associated with the two most significant updates arising from changes in the financial information system.

- 65. Reference: HQD-11, Document 1, pages 16 - 18**

Questions:

- a) With respect to Table 2, please provide a schedule that shows by customer class the allocation of the cost of service for 2007 based on R-3610-2006 and D-2007-12 but not modified for the 2008 methodological changes.
- b) For purposes of calculating the 2007 values for Table 2, were the three changes described in Table 1, the only cost allocation changes in 2008 that were considered to be “methodological changes”?
- c) Were all of the relevant data available for 2007 to implement all of the updates captured in Column (5) of Table 1? If not, how was the allocation performed?
- d) Please provide a schedule that is similar to Table 2 but that compares:
- 2007 results based on D-2007-12 and

- 2008 results prior to including any of the methodological changes identified in Table 1.

**66. References: HQD-1, Document 1, page 14
HQD-11, Document 3, page 7**

Question:

- a) Please explain the difference between the total 2008 revenue requirement reported in HQD-1, Document 1 (\$10,542 M) and the value reported in HQD-11, Document 3 (\$10,384.6 M).

67. Reference: HQD-11, Document 3, pages 7 and 13

Questions:

- a) Please explain the basis for the Other Revenue value of \$166.9 M reported in HQD-11, Document 3 and why it differs from the Other Revenue value reported in HQD-5, Document 2 (\$157.2 M).
- b) Please indicate where the basis for the allocation of Other Revenues (Table 1, Column 6 and Table 7, Column 19) to customer classes is provided.

**68. Reference: HQD-12, Document 1, page 10, lines 3-11
Quebec Energy Strategy 2006-2015, pages 53-54**

Question:

- a) The referenced portion of the Energy Strategy also indicated that “ [...] in the pricing structure, the price for the first 30 kilowatthours per day would drop, reducing electricity bills for small customers”. Where in the Application does HQD respond to this particular aspect of the Government’s strategy?

69. Reference: HQD-12, Document 1, page 13, lines 4-5

Question:

- a) What are the specific constraints associated with the deployment of the SIC system that impacted the development of the 2008 Rate Application?

70. Reference: HQD-12, Document 1, page 15, lines 5-12

Questions:

- a) What is HQD's position as to whether a uniform or differentiated rate increase should be implemented for 2008?
- b) In HQD's view, what are the issues and factors that should be considered in determining whether a uniform or differentiated rate increase (by customer class) should be implemented for 2008?

71. Reference: HQD-12, Document 1, Annex A, page 69

Questions:

- a) OC has been unable to replicate the values reported by customer class in Column (g) of the Table on page 69. Please provide a schedule setting out the actual calculation of values reported in Column (g) for each customer class. Please clearly document the values and the sources of data used in the calculation.
- b) Please explain the purpose of the various adjustments made in columns (f) and (g) and why they are necessary.

72. Reference: HQD-12, Document 1, page 19, lines 9-13 and page 20, Table 5

Question:

- a) Please indicate whether the following situations are considered to be TAE customers or non-TAE customers for purposes of Table 5:
 - Electricity is the main source of space heating but the household uses another source (e.g. woodstove) for supplementary heating.
 - Natural gas is the main source of space heating but the household uses electricity (e.g., baseboard heater) for supplementary heating.

73. Reference: HQD-12, Document 1, page 20, Table 5

Question:

- a) Please provide tables in the same format as Table 5 that show the breakdown for Rate D and Rate DM separately.

**74. References: HQD-12, Document 1, page 20, Table 5
R-3610-2006, HQD-17, Document 7, page 70, Question 56**

Questions:

- a) Please update the responses to all parts of OC Question 56 from R-3610-2006 to reflect the most recent (2006-2007) billing data. In doing so, please breakdown the range above 100 kWh per day to include 101 – 150 and 151 plus.
- b) Please provide similar responses for TAE; non-TAE and all residential (Rate D and DM) customers based on:
 - The six months of May to October inclusive,
 - The six months of November to April inclusive.

75. Reference: HQD-12, Document 1, page 23, line 5 to page 24, line13

Question:

- a) Is the switching to the alternative heating source done by the customer or automatically by HQD when the trigger temperature is achieved?
- b) Based on a “normal temperature year” please provide the assumed annual electricity requirements of an average single family home using only electricity to meet heating requirements in:
 - the less than -12 degree C° zone and
 - the -15 degree C° zone.
- c) Please provide a schedule that shows the derivation of the annual electricity bill for each of the households in part (b) based on Rate D and Rate DT.
- d) Please indicate the annual reduction in electricity for each of the two average homes in part (a) if the alternate heating source is used during all hours that the temperature falls below the prescribed trigger point.
- e) Please provide a schedule that shows the revised electricity bill for each of the homes identified in part (b) based Rate DT and the electricity use reduction in part (c).
- f) Please provide a schedule that calculates the avoided costs (for 2007) for each of two average homes based on the reductions in part (d). Please indicate the source of the avoided cost assumptions used in the calculation.
- g) Please describe the metering arrangements required for Rate DT and indicate the incremental cost of such arrangements relative to those for a Rate D customer.

**76. References: HQD-12, Document 1, page 25, Table 10
HQD-12, Document 1, page 17, Table 2**

Question:

- a) Please revise Table 10 to show the rates that would result from a 4.4% average increase for Rate D based on the same rate structure strategy.

77. Reference: HQD-12, Document 1, pages 36-38, Tables 22-25

Questions:

- a) Please revise Tables 22 through 25 to show the impacts for Rate D assuming an average Domestic class rate increase of 4.4%.
- b) With respect to Table 25, do the usage levels provided for an Apartment, Small Home, Very Large Home and Imposing Home assume electric space heating?
- c) With respect to Table 25 do the usage levels for the various typical homes assume air conditioning?

78. Reference: HQD-12, Document 1, page 38, Table 27

Question:

- a) Please revise Table 27 to show the impact of a 4.4% average rate increase for Rate D customers.

79. Reference: HQD-12, Document 2, page 11, lines 21-24

Question:

- a) The text states there are a variety of means of using marginal costs to establish rate structures in order to obtain a useful price signal. Please describe some of the alternative methods, particularly those applicable to residential customers.
- b) Please describe how the approach adopted by HQD takes Québec's particular context into account.

80. Reference: HQD-12, Document 2, page 12, lines 7-20

Questions:

- a) Please provide the basis/analysis supporting the statement that, for customers with electric space heating, space heating requirements represent half their total use.

- b) In determining that heating represents half of total usage, does total usage include:
 - Water Heating,
 - Air Conditioning?
- c) For a typical customer using electricity for space heating, water heating and air conditioning, what percentage of total use does each of these end-uses account for?

81. Reference: HQD-12, Document 3, page 7, lines 18-26

Question:

- a) What does HQD consider to be:
 - Wasteful uses of electricity service,
 - Justified uses of electricity service.

82. Reference: HQD-12, Document 3, page 8, lines 1-11

Question:

- a) Why is it important for the higher prices to be applicable to a significant volume of kWh for each customer?
- b) Is it not more important that the higher prices be applicable to that portion/volume of electricity use that is likely to be influenced by the higher prices?
- c) Will the volume of electricity use that can be influenced by higher prices depend on the uses a customer makes of electricity (e.g., basic use versus water heating versus space heating, etc.)?

83. Reference: HQD-12, Document 3, page 10, Table 1

Question:

- a) Please provide the references to HQD-11, Document 3 for each of the costs used in the Table as well as the number of contracts used to determine the unit amounts.

84. Reference: HQD-12, Document 3, page 15, lines 1-8 and Table 3

Question:

- a) Please describe how the application of the rules of Ramsey-Boiteux are applied to the choice of energy blocks. Does it mean that the choice should be based on what is the volume of electricity associated with inelastic versus elastic uses?

85. Reference: HQD-12, Document 3, page 16, lines 13-24

Question:

- a) Where in the quote does NERA make reference to applying a sufficiently high price to a significant volume of kWh?

**86. References: HQD-12, Document 3, page 17, lines 14-18
HQD-12, Document 3, page 17 line 25 to page 20**

Questions:

- a) On page 17 (lines 14-18), HQD contends that it is not a question of defining a profile without heating load and that the first block neither includes nor excludes specific uses. However, all of ensuing discussion and rationale for the 30 kWh/day first block is based on what the average consumption associated with “basis use” is (i.e., use excluding heating). Please reconcile.
- b) Please provide any reports or analysis HQD has that indicates that the elasticity of electricity use with respect to space heating is materially higher than with respect to other uses (including water heating and air conditioning).
- c) What is meant by the requirement set out in the first reference that the defined consumption block must be “significant for the customer”?

87. Reference: HQD-12, Document 3, page 18, Table 4 and page 19, Table 5

Question:

- a) What is the source of the data presented in Table 5? Is it the same as the “customer sample” used for Table 4?
- b) Is the 155 kWh reported for air conditioning in Table 5 based on:
- The average annual electricity requirement for air conditioning for those homes that have air conditioning, or
 - The average annual electricity requirement for air conditioning for all the homes in the sample, some of which may not have air conditioning.
- If the former, please reconcile the 155 kWh usage reported in Table 5 with the implied 365 kWh usage for air conditioning in Table 5 (i.e., 365 days x 1 kWh)
- c) What is the “penetration” of air conditioning in the sample data used for Table 5?

88. Reference: HQD-12, Document 3, page 18, Table 4

Question:

- a) Based on the sample use to create Table 4, please provide the range of usage/day for each month that captures:
- 50% of the customers,
 - 75 % of the customers, and
 - 95% of the customers.
- Please provide the result both including and excluding air conditioning.

89. Reference: HQD-12, Document 3, page 18, lines 4-7

Question:

- a) Based on the billing data, please provide the average daily consumption for each month for TAE customers, non-TAE customers and all Customers.

90. Reference: HQD-12, Document 3, page 21, lines 1-10

Question:

- a) Since Transmission and Distribution costs are allocated based on demand (and also customer count in the case of distribution) but residential customers are billed based on energy use, please explain why the average cost variance perspective is still not applicable to Transmission and Distribution costs.

91. Reference: HQD-12, Document 3, page 21, line 18 to page 22, line 4

Question:

- a) If the marginal cost of electricity for space heating is 10.68 cents per kWh (re: Table 3) and the marginal cost of space heating with natural gas (adjusted for the additional maintenance and acquisition costs of gas systems) is the equivalent to 11.43 cents per kWh, does this suggest that heating with electricity (as opposed to natural gas) is the more economically efficient option? If not, why not?

92. Reference: HQD-12, Document 3, page 24, lines 15-21

Questions:

- a) What level of rate impacts does HQD consider to be too significant for customers?
- b) Please explain more fully how the expected evolution of future avoided/marginal costs supports a gradual increase in the rate for the second block.

93. Reference: HQD-12, Document 3, pages 27-28

Questions:

- a) The text on page 27 appears to suggest that the difference between the marginal cost for space heating and other uses is important. However, the text on page 22 (lines 5-9) suggests that the marginal costs are similar for all uses. Please reconcile.
- b) The text appears to suggest that a demand charge targets space heating (i.e., usage over 50 kW is generally associated with space heating) but a 3rd energy block would not. Please explain why a demand charge is better able to target space heating.
- c) Please describe the merits of using a demand charge in the winter months as opposed to a 3rd energy block set at a level of usage equivalent to 50 kW.
- d) Since normally residential customers only have an energy meter, how does HQD determine (a priori) that a meter capable of also measuring demand should be installed on a residential customer?
- e) The Application seems to suggest (page 28, lines 8-11) that the demand charge is meant to capture the marginal cost of Transmission and Distribution. However, the subsequent discussion does not make any specific reference to the marginal cost of Transmission and Distribution. Please reconcile.

94. Reference: HQD-12, Document 3, page 33, line 13 to page 34, line 6

Question:

- a) Does HQD have any estimates of what is the marginal cost of adding a new customer to the system – even if virtually no electricity is purchased?

95. Reference: HQD-12, Document 3, page 34, line 20 to page 35, line 9

Questions:

- a) What does HQD mean by “dilute the price signal”? Wouldn't increasing the size of the winter block lead to an increase in the price for the second block (assuming no changes to either the fixed charge or the first block energy price)?
- b) What are the “winter uses” that the additional 5 kWh per day represents and that, therefore, contribute to the system's peak?

- c) Why is contribution to system peak the determining factor in this discussion, when previously HQD indicated that elasticity of usage should be the determining factor when considering block sizes?
- d) What is the definition of “winter” used in Table 16?

96. Reference: HQD-12, Document 3, page 35, lines 9-16

Questions:

- a) If not addressed in response to the preceding information requests, please provide the billing frequency data that supports the 10% value.
- b) Please explain how the 10% is to be interpreted:
 - The number of customers billed only on the first energy block during the winter increases by 10% in terms of total number, or
 - Ten percent more of the total customers are now billed only on the first energy block.

97. Reference: HQD-12, Document 3, page 36, lines 1-4 and Table 18

Question:

- a) Please explain why the distribution of bill impacts (Table 18) is a relevant consideration to the issue of whether customers are seeing the appropriate price signal. At HQD-12, Document 3, page 22 (lines 10-18), HQD has asserted that it is the price seen at the “margin” that is important in terms of the appropriate price signal.

98. Reference: HQD-12, Document 3, page 36, line 5 to page 37, line 9

Question:

- a) Does HQD agree that a “good price” signal is one that is closer to marginal costs? If not, why not?
- b) Why isn't the fact that the price of the second block will move closer to marginal costs considered an economic argument in favour of increasing the size of the first block?
- c) Based on the data presented in Table 4, does maintaining the size of the first energy block at 30 kWh/day for the core winter months (i.e., December to March) lead to a risk of billing basic uses that are not elastic in the second block. If not, why not?

99. Reference: HQD-12, Document 3, page 37, line 10 to page 39, Table 21

Question:

- a) Is the definition of summer used in Section 4.2, consistent with the definition of winter used in the previous section?
- b) Wouldn't a shorter definition of summer resolve the issues raised on page 37 (lines 17-20)? Did HQD consider such an option?
- c) Why is the fact that 47% of the kWh used in Rate D are in the first block important in terms of sending the appropriate price signal?

100. Reference: HQD-12, Document 3, page 42, lines 1-15

Question:

- a) Using a first block size of 30 kWh/day, what percentage of the Rate D customers are:
 - Billed at the second block energy rate for all four winter months,
 - Billed at the second block energy rate for at least one of the four winter months,
 - Billed at the second energy block for all months of the year, and
 - Never billed at the second energy block?
- b) Please redo the response to part (a) assuming that the winter energy block is set at 35 kWh/day.
- c) Does HQD consider the dispersion of rate impacts associated with applying the total increase to the second energy block to be too great and unacceptable?

101. Reference: HQD-12, Document 3, page 44

Question :

- a) Please provide a schedule that sets out the total energy (GWh) that falls into each of the following blocks:

	Winter (Dec – Mar)	Summer (Apr – Nov)	Total
0-25 kWh/day			
>25-30 kWh/day			
>30-35 kWh/day			
>35-60 kWh/day			
>60-100 kWh/day			
>100-150 kWh /day			
>150 kWh / day			

102. Reference: HQD-12, Document 3, page 51, line 1 to page 52, line 10

Question:

- a) Please explain more fully why the price signal provided by the third energy block is not significant to those customers who will be exposed to it (page 52, lines 6-8).

103. Reference: HQD-12, Document 3, page 54, lines 5-9

Question:

- a) Why is it important that the high price apply to a significant volume of kWh as distinct from being applicable to a significant number of customers (in term of their marginal energy use)?

104. Reference: HQD-12, Document 3, page 55, lines 11-14; page 56, lines 10-14 and page 58, lines 5-9

Question:

- a) How many of HQD's Rate D and DM customers would pay a demand charge in one or more of the summer months?

105. Reference: HQD-12, Document 3, page 56, lines 15-25 and page 58, Table 37 to line 9

Questions:

- a) Will the minimum charge in the summer months be based on the maximum demand in the preceding winter? If not, what will it be based on?
- b) In Table 37, what was the 53 kW minimum billing demand based on?
- c) For electric space heating customers, won't the adoption of a minimum demand billing based on winter use reduce the incentive for customers to manage their summer peaks?
- d) Does HQD have any information as to what the summer peaks are for customers that will be demand billed? For how many customers does their summer peak exceed 65% of their winter maximum demand? For these customers, on average, for how many of the 8 summer months does the summer demand exceed 65% of the maximum winter demand?
- e) Do the additional 239 customers (i.e., 2,777 vs. 2,538) already have demand meters or will new metering need to be installed? If new metering is required, what will be the cost?

106. Reference: HQD-12, Document 3, page 57, lines 9-12

Question:

- a) Are the demand meters currently installed on Residential customers who receive capacity invoices capable of recording kVA as well as kW? If not, how many will have to be upgraded and what will be the cost?

107. Reference: HQD-12, Document 3, page 61, lines 13-21

Questions:

- a) After April 1, 2008, will owners of new apartment building be able to opt for bulk metering?
- b) If the answer to part (a) is yes, will the owners have a choice of contracting for Rate D or a general rate? If no choice is available, what rate will the building qualify for?
- c) If the answer to part (a) is yes, why is HQD allowing new apartment building to continue to adopt bulk metering?
- d) Please clarify the interpretation of the 94%/15% figures in footnote #34 (e.g., does this mean that 94% of residential customers living in apartment building in Quebec are individually metered, while in Ontario only 15% of residential customers in apartment buildings are individually metered?)
- e) What are the sources of the Québec and Ontario referenced in footnote #34?
- f) The text (lines 20-21) states that customers in Québec tend to choose individual metering. Please clarify that by "customer" HQD means the apartment owners? Does HQD have any information as to why this is the case in Québec?

108. Reference: HQD-12, Document 3, pages 62-64

Questions:

- a) Why do the capacity invoice reforms for Rate DM mainly affect buildings with 12 dwellings or less? If the capacity charge is applicable to the higher of: i) 50 kW or ii) the product of 4 kW time the number of dwellings, won't buildings with very few dwelling be more likely to avoid a capacity charge?
- b) Does the bill impact distribution shown in Table 40 include the application of a power factor adjustment to those buildings that are currently under 90% or is it based strictly on the kW demand of the current buildings?

- c) Why doesn't the proposal for DM capacity billing reform continue to recognize and make allowance for the additional electricity used by the common areas?

109. Reference: HQD-12, Document 5, page 8, lines 9-13

Questions:

- a) Please clarify what the 0.66 kW per customer represents as distinct from the 0.83 kW decrease during the network's peak hours.
- b) Please confirm that the network peak hours referred to were those shown in Table 3.
- c) What are the winter months for Rate DH?
- d) To what does HQD attribute the higher peak reduction experienced in Québec versus that anticipated for Ontario or California?

110. Reference: HQD-12, Document 5, page 15, lines 3-10

Question:

- a) Does the \$200 estimated savings represent just the electricity bill savings or has it been adjusted for the cost of using the alternate energy form?

111. Reference: HQD-12, Document 5, page 17, line 11 to page 18, line 3.

Question:

- a) Why does HQD conclude that without a dual energy system customers on the DT rate will lose money:
- Isn't the DT rate designed to be revenue neutral for a space heating customer (page 15, lines 6-10), such that they will breakeven if they do not change use?
 - Wouldn't non-space heating customers have a higher percentage of electricity use in the off-peak period, and therefore naturally benefit from the DT rate?

112. Reference: HQD-12, Document 5, page 19, lines 11-17

Questions:

- a) Does HQD consider +/- 5% to be an acceptable range of impacts within the Québec context?
- b) Does the range of acceptable bill impacts for rate structure changes depend at all on the overall average rate increase the customer class will experience? If yes, how?

113. Reference: HQD-12, Document 5, page 20, lines 8-20

Questions:

- a) Does the even split of energy use between peak and off-peak periods apply to both customers with electric space heating and those without electric space heating?
- b) Based on the customer sample, please provide a schedule that sets out the average use in the peak and the off-peak period (kWh/day) for each month of the year. Please provide separate schedules for customers with and without electric space heating.

**114. References: HQD-12, Document 5, page 25, Table 8
HQD-12, Document 5, page 19, lines 18-29**

Question:

- a) On page 19, HQD sets out a number of constraints for a Québec TOU rate. However, the proposed Rate DA does not appear to adhere to these constraints, for example:
 - The peak/off peak rate differential in the winter exceeds 1.5 ¢/kWh for both the first and the second energy block.
 - The winter off-peak price for the first block is less than the low price for Rate DTPlease explain why these constraints were not adhered to.

**115. References: HQD-12, Document 5, page 26, lines 11-22
HQD-12, Document 5, page 33, lines 12-20**

Question:

- a) What is the basis for the assumed 20-30% energy shift?
- b) Has HQD reviewed the shifting obtained in other jurisdictions based on peak/off peak rate differentials similar to those it is proposing? If so, what was the load shifting observed in those circumstances?
- c) Please explain and reconcile the positive assumptions with respect to load shifting presented on page 26 with the view expressed on page 33 that there will be little shifting due to TOU rates.

**116. References: HQD-12, Document 5, pages 38-39
HQD-12, Document 5, page 27, Table 9**

Questions:

- a) Based on the costs estimates per customer presented on page 39 and the possible bill savings presented on page 29, please comment on the following observations:

- It is unlikely that any residential customers would be able to achieve sufficient bill savings (through shifting) to offset the added metering/system costs associated with a TOU rate if interval meters were used with either a mesh network or telephone lines.
 - It is likely that only large customers (e.g. those with space heating) would be able to achieve sufficient savings to offset the metering costs associated with double register meters or interval meters with integrated load profiles.
- b) Under each of the four metering approaches (and assuming no free-riders), what would have to be the average shift (in terms of % peak use) for an electric space heating customer in order for the total avoided associated with the shift to exceed the per customer cost of deployment?
- c) Under each of the four metering approaches (and assuming no free-riders), what would have to be the average shift (in terms of % peak use) for a non-electric space heating customer in order for the total avoided associated with the shift to exceed the per customer cost of deployment?

117. Reference: HQD-12, Document 5, pages 43-45

Question:

- a) Has HQD confirmed that the size of each group set out in Table 15 is sufficiently large to yield statistically valid results? If not, why not?

118. Reference: HQD-12, Document 5, pages 45-46

Question:

- a) Given the concerns expressed on page 46 (lines 3-12), does HQD expect to be able to achieve an acceptable sample of customers in order to conduct the experiment?

119. Reference: HQD-12, Document 5, Appendix E

Question:

- a) Please explain the basis for the simple TOU rate. In particular, please explain why the rational for the pricing of the first block of energy.