# RESPONSES BY HYDRO-QUÉBEC DISTRIBUTION TO REQUEST FOR INFORMATION NO. 1 FROM ROEÉ

# AUTONOMOUS GRIDS

#### REQUEST FOR INFORMATION NO. 1 FROM ROEÉ HQD – 2014-2023 SUPPLY PLAN RÉGIE DE L'ÉNERGIE - CASE R-3864-2013

# POWER DEMAND MANAGEMENT MEASURES – INTEGRATED SYSTEM

1. **Reference:** (i) HQD-3, document 1, page 37

# Preamble:

(i) "8.2. Please elaborate on the discrepancies with respect to the values announced in the previous supply plan, in particular the decrease of 230 MW (from 870 to 640 MW) in the load reduction related to residential dual energy for 2013–2014 and 2014–2015 [references (i) and (ii)].

# **Response:**

The discrepancy between with respect to references (i) and (ii) is due to a refinement of the estimated peak load reduction related to residential dual energy. Note that this refinement affects both historical values and projections. The impact of peak load reduction is now determined based on a comparison between the heating load curve of a representative sample of customers at tariff DT and that of a comparable sample of customers at tariff D. Thus, the reduction cannot be ascribed to changes in numbers of residential dual energy equipment appliances." [Our emphasis.]

<u>NOTE FROM THE DISTRIBUTOR</u>: THE CHANGES TO THE RESPONSE TO QUESTION 8.2 OF THE RÉGIE'S REQUEST FOR INFORMATION NO. 1 (EXHIBIT B-0021) WERE MADE BY THE INTERVENER.

Question 1:

**1.1.** Given that the discrepancy between references (i) and (ii) of question 8.2 from the Régie is more than 25%, would it be more relevant, in the Distributor's view, to speak in this context of a correction of the estimation methodology rather than a refinement?

# Response:

# See the response to question 19.1 of the Régie's request for information no. 2 in exhibit HQD-3, document 1.1.<sup>1</sup>

**1.2.** Please detail what this refinement consists of and how it led to a 230-MW difference in the estimated load reduction related to residential dual energy for 2013–2014 and 2014–2015. Please clarify and quantify the assumptions used in each evaluation model.

# Response:

# See the response to question 19.1 of the Régie's request for information no. 2 in exhibit HQD-3, document 1.1.

2. Reference: (i) HQD-3, document 1, page 37;

# Preamble:

(i) "8.4. Please elaborate on the efforts the Distributor intends to make in order to preserve the stock of dual energy equipment and counter erosion in the dual energy client base, particularly given the waning numbers of customers using fuel oil as a primary heating source [reference (v)].

#### **Response:**

Promotional efforts to maintain the existing dual energy equipment will continue over the coming years despite the decline in the number of potential new customers who are currently using heating oil. Efforts will focus on building the loyalty of current dual energy customers.

The Distributor reiterates that these latter customers are not eligible for the "Heating with Green Power" program. [Our emphasis.]

#### Question 2:

2.1 Does the Distributor agree that all customers have to do is abandon the dual energy tariff in order to become instantly eligible for the "Heating with Green Power" program?

#### Response:

#### The Distributor invites the intervener to consult the parties responsible for the "Heating with Green Power" program on this issue.

2.2 Has the Distributor notified the Government of Québec of the potential impact of the "Heating with Green Power" program on the number of tariff DT customers and, consequently, on the likelihood that it will shrink the maneuvering room for power demand management?

#### Response:

# The request goes beyond the bounds of this case.

#### 3. Reference:

(i) http://www.newswire.ca/fr/story/1285243/vague-de-froid-hydro-quebec-demande-lacollaboration-de-la-population-afin-qu-elle-reduise-sa-consommation-d- electricite-enperiode-de-pointe

(ii) http://www.newswire.ca/fr/story/1285445/vague-de-froid-hydro-quebec-demande-ases-clients-de-poursuivre-leurs-efforts-de-red uction-de-laconsommation-d-electricite-enperiode-de-pointe-et-le

(iii) http://www.newswire.ca/fr/story/1292703/pointe-historique-en-vue-hydro-quebecdemande-la-collaboration-de-la-population-afin-qu-elle-reduise-sa- consommation-delectricite-en-periode-de-point

(iv) http://www.newswire.ca/fr/story/1293163/pointe-record-d-electricite-hydro-quebecdemande-a-ses-clients-de-poursuivre-leurs-efforts-de-reduction-de-la- consommation-delectricite-en-periode-de

(v) HQD-1, document 1, page 19

(v) "The Distributor will actively pursue its customer awareness raising efforts with the goal of inducing customers to consume electricity judiciously at peak times.

In addition, it will continue to make appeals to the public as necessary. The Distributor seeks to increase the public profile of this method and to *analyze how the impact of appeals to the public evolves over several successive winters.*" [Our emphasis.]

# **Question 3:**

3.1 Unlike in past years, the Distributor did not publish information concerning the results of the appeals to the public that it put out on 2, 3, 21, and 22 January 2014 with a view to reducing peak electricity demand. Please indicate these results.

#### **Response:**

# See the response to question 11.2 from AHQ-ARQ in exhibit HQD-3, document 3.<sup>2</sup>

**3.2.** Please indicate the reason or reasons why the Distributor no longer communicates the results of its customers' efforts to sporadically reduce their electricity consumption.

# **Response:**

# See the response to question 11.2 from AHQ-ARQ in exhibit HQD-3, document 3.

4. **Reference:** (i) HQD-1, document 1, page 39

(i) "The Distributor will take steps to participate in voluntary markets, particularly focusing on the certification of its wind parks by the Ecologo program."

# Question 4:

**4.1.** Please indicate who, whether the Distributor or the owners of the generating infrastructure, will defray the cost of Ecologo certification.

# Response:

The supply contracts signed with the wind generators stipulate that the costs of the administrative procedures necessary to obtain and maintain the rights relating to environmental attributes are borne by the Distributor.

<sup>1</sup> References:

(ii) case R-3770-2011, exhibit B-0006, p. 32;

(iii) http://www.newswire.ca/en/story/1293163/pointe-record-delectricite- hydro-quebec-demande-a-ses-clients-de-poursuivreleurs-efforts-de-reduction-de-la-consommation-d-electricite-enperiode-de.

<sup>(</sup>i) Exhibit B-0021, p. 37;

#### Preamble:

(i) The Distributor explains the decrease from 870 to 640 MW of dual energy-related load reduction:

"The discrepancy between references (i) and (ii) is due to a refinement of the estimated peak load reduction related to residential dual energy. Note that this refinement affects both historical values and projections. The impact of peak load reduction is now determined based on a comparison between the heating load curve of a representative sample of customers at tariff DT and that of a comparable sample of customers at tariff D. Thus, the reduction cannot be ascribed to changes in numbers of residential dual energy appliances." [Our emphasis.]

(ii) "Moreover, in contrast to the meter sampling techniques currently available to the Distributor, AMI [advanced metering infrastructure] offers the advantages of a census as opposed to a survey: absolute accuracy of results and the ability to obtain highly detailed information. This will afford the Distributor better knowledge of consumption curves and an opportunity to develop solutions that give consideration to customers' realities."

(iii) Hydro-Québec is asking its customers to continue their efforts to reduce their peak consumption, and thanks them for their cooperation, on Wednesday, 22 January 2014 from 4 p.m. to 8 p.m. and on Thursday, 23 January 2014 from 6 a.m. to 9 a.m. and from 4 p.m. to 8 p.m.

#### **Requests:**

**19.1.** Please present the new methodology for estimating the load reduction related to residential dual energy and explain how it differs from the old one.

#### **Response:**

The impact of residential dual energy on peak load reduction is now estimated based on a comparison between the heating load curve of a representative sample of customers at tariff DT and that of a comparable sample of customers at tariff D. The average curve of the tariff D sample is modeled on the basis of real climate data, and likewise for the average profile of the tariff DT customers sample. The two average curves are then estimated at normal climatic conditions. The average load reduction corresponds to the difference between the two normalized average curves at system peak. The total reduction under normal climatic conditions is obtained by multiplying the average reduction by the number of tariff DT customers.

The old methodology was based on the characteristics of consumption before load reduction as derived from climate simulations and indicators (for example, degree-days of heating for allocation of heating-driven consumption before load reduction). Consequently, inadequate representativeness of heating-driven consumption before reduction could cause a poor estimate of the load reduction related to residential dual energy.

Now, by making a comparison between comparable tariff D and tariff DT customers, the Distributor ensures adequate representativeness of heating consumption before load reduction, including peak load reduction.

#### <sup>2</sup> 11. Reference:

B-0005, HQD-1, document 1, p. 19, lines 1-5

Original: 2014-04-07

#### Preamble:

"The Distributor will actively pursue its customer awareness raising efforts with the goal of inducing customers to consume electricity judiciously at peak times.

"In addition, it will continue to make appeals to the public as necessary. The Distributor seeks to increase the public profile of this method and to analyze how the impact of appeals to the public evolves over several successive winters." [Our emphasis.]

#### **Requests:**

**11.2.** Please provide the dates and times of all appeals to the public made by the Distributor in 2012, 2013, and 2014. Please indicate the load reduction evaluated by the Distributor for each of these appeals.

#### Response:

The table below presents the dates of the appeals to the public and the estimated impact for winters 2010–2011 to 2013–2014.

#### TABLE R-11.2

# WinterDateEstimated<br/>impact (MW)2013-201422 January4002012-201323 January4002011-2012No appeals to the public2010-20112010-201124 January300

#### **APPEALS TO THE PUBLIC**