

R-3864-2014
Information request no. 3 of ROEEÉ (expert Tim Weis) to Hydro-Québec

1. BACKGROUND TO SUPPLY PLAN

1.1 The Distributor's strategy

Reference :

- (i) R-3864-2013, HQD-2, Document 1, Section 1.1

Questions

- 1.1.1** What is the “long term horizon” that is considered?
- 1.1.2** In the elaboration of its strategy and in the evaluation and choice of means to satisfy the energy needs of Quebeckers in the autonomous grids, does Hydro-Quebec take account of and price:
- a)** local exterior and interior air quality and health impacts and costs? If not, why not? If yes, please explain the methodology used and provide the documentation relating to these results;
 - b)** fuel spill and soil contamination risks and costs? If not, why not? If yes, please explain the methodology used and provide the documentation relating to these results;
 - c)** required carbon offsets? What offsets are required? At what price?
- 1.1.3** What is the projected fuel price being used for determining strategy, planning and choice of means to satisfy energy needs in the autonomous grids? Do these prices reflect any anticipated carbon pricing?
- 1.1.4** Are values for subsidizes included in delivered diesel fuel costs?

1.2 Follow-up to the 2011–2020 Supply Plan strategy

Reference:

- (i) R-3864-2013, HQD-2, Document 1, Section 1.2
(ii) R-3864-2013, HQD 4. Document 1(Réponses DDR no 1 de la Régie), question 16

Questions

- 1.2.1 a)** In reference (i), it is mentioned that for JEDs in the Îles de la Madeleine and in Kangiqsualujjuaq, studies are continuing. Are these technical feasibility or economic studies? When will they be publicly available?
- b)** Is the Kangiqsualujjuaq analysis being done in isolation or as part of a regional approach to Ungava/Nunavik more broadly? Has there been regional level consultations or planning for alternatives?
- c)** In reference (ii), in response to the Régie question 16.2, Hydro-Québec states that the Kangiqsualujjuaq JED would not be economic now? Please provide details and the basis of these results?
- d)** According to Hydro-Quebec, what are the primary reasons for the slow progress toward JED projects in the autonomous grids?
- e)** Has Hydro-Quebec carried out studies of the institutional, social and political barriers that reside with Hydro-Quebec and those that reside with the local administrations and populations to the advancement of JED projects? Has Hydro-Québec sought appropriate solutions, including by consultation and collaboration with the local populations? Please provide details.
- f)** Has Hydro-Québec conducted benchmarking or other studies regarding progress of JEDs in other jurisdictions and how success elsewhere can be translated into success in the autonomous grids? If not, why not? If yes, please provide the relevant studies and documentation.

2. PORTRAIT OF THE TERRITORIES

Reference:

- (i) R-3864-2013, HQD-2, Document 1, Section 2 and Section 4.1

Questions

- 2.1 a)** In describing the production equipment and arrangements deployed to satisfy the electricity needs of the five regions that make up the autonomous grids, no mention is made of diesel storage capacity and associated costs. Capacity shortages have posed economic and development challenges in Ontario recently. Storage capacity is not mentioned as a design requirement in Section 4.1 of Reference (i). Is there a fuel storage planning requirement?

b) How is fuel imported into each community? How does it arrive in emergencies? Have emergency shipments been required? If so, at what cost?

3. SUPPLY STRATEGY

Reference:

- i) R-3864-2013, HQD-2, Document 1, Section 5
- ii) R-3748-2010, C-SÉ-AQLPA-0015 , p. 9-11
- iii) R-3854-2013, HQD-9, document 2, p. 13-14

Preamble

iii) *« Les mesures les plus importantes [du PTÉ pour la Basse Côte-Nord] touchent le chauffage électrique : l'isolation accrue des planchers et des toits, la technologie photovoltaïque et les pompes à chaleur à climat froid ou géothermiques. » (...)*

« Pour le PTÉ électrique [pour la Haute-Mauricie], la mesure la plus importante vise la technologie photovoltaïque. »

Questions

3.1 a) Does Hydro-Quebec have long-term energy sustainability requirements and goals with respect to the supply of the autonomous grids and with respect to energy security and local supplies?

b) In elaborating its supply strategy, especially for communities north of the 53rd parallel, has Hydro-Quebec considered setting a long-term goal of providing most or all energy needs (including space and water heating) through non-thermal generating capacity (wind, solar, hydro and underwater turbines) and through reduction in energy consumption and energy efficiency measures? If not, why not? If yes, please provide the studies and documents relating to this exercise.

3.2 Directing communities that heat with fossil fuels, towards electricity water and space heating can help with long-term sustainability if electricity supply is targeted to become renewably fuelled. Would such fuel switching toward electricity be considered counter to energy efficiency targets/programs?

3.3 With respect to renewables:

a) In the view of Hydro-Quebec, what are the major secular and factors that have changed since its last supply plan that may influence the feasibility and economics of renewables?

b) Are regional development and employment aspects being taken into account? Concretely, how? When will wind-diesel results be available? What/when are next steps/efforts being considered? What/when are next steps?

c) With respect to the studies of JED, are the studies being undertaken still preliminary? What are the next steps? What is the critical path for the development and coming on line of JED projects?

d) Considering the characteristics of photovoltaic solar panels as described in references (ii) and (iii), and the rapidly falling costs of PV systems in particular, why did Hydro-Quebec omit any reference to solar water heating and photovoltaic electricity production in its consideration of renewables in its supply plan?