

Q. GENERATION HYDRO**PUB 59.0****B-4 Plant Refurbishment – Petty Harbour \$1,829,000**

Board Order P.U. 35(2003), p. 8, states, in referring to discussions between the utilities regarding the upgrade of generation facilities, that “...the Board finds it appropriate that a utility undertake such discussions and document the results as part of the application.” Please provide evidence of any such discussions that have taken place regarding the refurbishment of the Petty Harbour Hydroelectric Generating Plant or explain why such discussions did not take place.

A. *General*

No evidence of specific discussions between Newfoundland Power and Newfoundland and Labrador Hydro (“Hydro”) related to the proposed refurbishment of the Petty Harbour Hydroelectric Generating Plant (the “Petty Harbour Project”) exists. However, discussions related to generation planning for the integrated island electric system (the “Island Grid”) occur on an ongoing basis between the two utilities.

The fact that discussions relating specifically to the Petty Harbour Project did not take place, does not raise any serious issue “...that needless expenditure is not being caused by duplication of services or lack of sharing of resources...”¹ on the Island Grid.

Joint Planning

Newfoundland Power and Hydro review matters that address efficiency and duplication in the power system in planning meetings. For example, the last planning meeting between the utilities was held on April 20, 2005. Among the issues related to the Island Grid discussed were: the supply to the Pasadena / Marble Mountain area; St. John’s 230/66 kV transformer capacity; the supply to the Voisey’s Bay Nickel (Argentia) area; and the generation planning for the Island Grid.

Newfoundland Power’s and Hydro’s discharge of their joint responsibility to ensure that duplication of services or resources not result in additional costs for customers is ongoing and continuous. It has not typically involved joint evaluation of projects such as the Petty Harbour Project. It has involved regular consultation regarding system planning for the Island Grid which provides a common basis for evaluation of expenditures such as the Petty Harbour Project by both Newfoundland Power and Hydro. Regular consultation regarding system planning for the Island Grid has been, and continues to be, a prominent feature of the relationship between the two utilities.

¹ See Order No. P.U. 35 (2000), p. 8.

One result of such regular consultation is a mutual understanding between Newfoundland Power and Hydro as to the appropriate means of evaluating the economics of refurbishing existing small hydroelectric plants. The mutual understanding is that the economic viability of projects such as the Petty Harbour Project are properly assessed by comparison to the cost of oil at Holyrood.

The Petty Harbour Project

Newfoundland Power's economic analysis of the future costs associated with the Petty Harbour Project indicates a levelized energy cost from the plant of 2.777 cents per kWh (see Report 1.2 *Petty Harbour Hydro Plant Refurbishment Appendix C: Feasibility Analysis*). This is considerably less than the 5.849 cents per kWh cost of oil at Hydro's Holyrood thermal generating plant². Given the large difference in the forecast energy cost of the Petty Harbour Project and Holyrood fuel costs, the economics of the Petty Harbour Project clearly justify the proposed expenditure.

The *Snook's Arm Wood Stave Penstock; Evaluation, Recommendation and Estimated Cost for Replacement* project which is part of Hydro's 2005 capital program was economically justified on a similar footing.³

Holyrood fuel costs practically represent the avoidable cost of generation on the Island Grid. It is an appropriate benchmark for evaluating the economic viability of refurbishment of small hydroelectric facilities on the Island Grid. Use of this benchmark reflects the fact that a reduction in generation on the Island Grid would directly increase the amount of oil consumed and therefore contribute to increased overall production costs.⁴

Concluding

The fact that no specific discussions were undertaken between Newfoundland Power and Hydro concerning the Petty Harbour Project was due to oversight on the part of the Company. Newfoundland Power will ensure such oversight does not reoccur.

In the context of overall planning for the Island Grid, the Petty Harbour Project (i) is economically justified and (ii) will not involve needless expenditure caused by duplication of services or lack of sharing of resources as between Newfoundland Power and Hydro.

² Based on 630 kWh per bbl and oil at \$C 36.85/bbl as per Hydro letter to the Board of April 14, 2005.

³ See Hydro's 2005 Capital Budget Application, Section G, Tab 1.

⁴ For a more detailed explanation of generation planning as it applies to the refurbishment of these relatively small hydroelectric generating plants, please refer to the response to PUB 60.0.