Q. Re 2011 Capital Plan, p. A-2

In NP's 2011-2015 Capital Plan for Generation there is no mention of the Victoria Hydro Plant Refurbishment over this time period whereas in the 2010 Capital Plan filed with last year's CBA the Victoria Hydro Plant Refurbishment was expected to be done in 2011 at a cost of $2.498 million. Please provide a copy of NP's engineering assessment(s)/report(s) that supports deferring this project from 2011 as previously planned to some point beyond 2015 as is apparently now the plan of NP.

A. There was no engineering assessment or report completed by Newfoundland Power to defer this project from 2011 to some future year. The condition of the plant assets justifies refurbishment in the near term.[1] However, the decision to delay the project was based upon economic considerations.

Capital expenditures on individual hydroelectric plants, such as the refurbishment of protection and control systems and the replacement of penstocks, are typically justified on the basis of maintaining access to existing hydroelectric generation at a cost that is lower than the cost of replacement energy. For example the present worth feasibility analysis of projected capital and operating expenditures for the Horse Chops Rewind and Rotor Re-insulation 2011 capital project has determined the levelized cost of energy from the plant over the next 50 years to be 1.015¢ per kWh, which is significantly less than the cost of replacement energy at Holyrood.[2]

In the case of the 106 year old Victoria hydro plant which produces 3.1 GWH of electricity on an annual basis, the levelized cost of energy associated with a complete plant refurbishment approaches the cost of replacement energy, depending upon the assumptions made relating to future operating and capital expenditures. As a result, the economic justification for this project would have to be based upon a comparison of two alternatives, one being the refurbishment and continued operation of the hydro plant, and the second being the decommissioning of the hydro plant and the associated dismantling and environmental cost.

As Newfoundland Power has not recently justified a capital project in this manner, further engineering work is required to scope the decommissioning alternative and estimate the associated cost. Until this engineering work is completed Newfoundland Power chose not to include the Victoria refurbishment project in its capital plan.

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1 Of primary concern is the condition of the plant penstock. A 174 metre woodstave section of the penstock is 60 years old, a 238 metre woodstave section of the penstock is 47 years old, and the 82 metre steel section of the penstock is 97 years old. Both the woodstave and steel sections of the penstock are deteriorated and have exceeded their anticipated service life.

2 The cost of electricity from the Holyrood thermal generating station is estimated at 11.63¢ per kWh. This is based upon a 630 kWh/barrel conversion efficiency and oil price forecast from Hydro of $73.30 per barrel for 2010 as per Newfoundland Hydro 2010 Capital Budget Application, Generation Planning Issues 2009 Mid Year Report dated July 2009.