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- Q. Please provide five cost saving programs that NP intends to implement in the next three years and provide an estimate of the expected cost savings and benefit to cost ratios of each program.
- A. Newfoundland Power's cost management involves a large number of initiatives of varying size, combining to reduce overall costs. Newfoundland Power's approach to cost management is to employ prudent management and sound engineering judgment to ensure that long-term cost control is reasonably balanced with the long-term quality of service it is required to provide to its customers.

Part of Newfoundland Power's ability to effectively manage operating costs is related to the condition of its electrical assets. Newfoundland Power's approach to capital investment balances the maximization of asset lives with the proactive replacement of deteriorated or inefficient plant. This, in turn, enables Newfoundland Power to deliver tangible benefits for customers in terms of lower cost and improved service.

Five initiatives which involve cost savings that Newfoundland Power intends to implement in the next three years include:

- 1. The Pitmans Pond Hydro Plant Refurbishment project included in the 2013 Capital Budget Application ("2013 CBA") will replace the 53 year old turbine runner with a new energy efficient model. The annual increased production using the new runner is estimated at 0.7 GWh at a levelized cost of 6.9 ¢/kWh. The annual cost saving associated with replacing this amount of production at Newfoundland and Labrador Hydro's Holyrood Generating Station ("Holyrood") is \$132,000. ¹ Comparing the levelized cost of production associated with the capital cost of the project to the current cost of production at the Holyrood thermal generating station, the benefit to cost ratio for this project is 2.7.²
- 2. The New Chelsea Runner Replacement and Rewind project included in the 2013 CBA will replace the 56 year old turbine runner with a new energy efficient model. The annual increased production using the new runner is estimated at 1.0 GWh at a levelized cost of 1.4 ¢/kWh. The annual cost saving associated with replacing this amount of production at Holyrood is \$189,000. Comparing the levelized cost of production associated with the capital cost of the project to the current cost of production at Holyrood, the benefit to cost ratio for this project is 13.7.

Annual cost savings are presented on a net present value basis. The savings are based on reduced production at Holyrood, assuming the current forecast oil price of \$118.80 will apply over the planning period used in evaluating the projects.

The benefit to cost ratio is calculated by dividing the current cost of producing electricity at Holyrood by the levelized cost of energy for the project. The current cost of production for Holyrood is estimated at 18.9¢/kWh. This is based upon a conversion efficiency of 630 kWh/barrel and oil price of \$118.80/barrel for 2012 as per Newfoundland and Labrador Hydro letter regarding the Rate Stabilization Plan - Fuel Price Projection dated March 31, 2012.

See footnote 1.

See footnote 2.

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3. The 2013 CBA, 2013 Capital Plan, Appendix A, identifies a 2014 project to increase production at Rocky Pond and Tors Cove plants through improvements at La Manche Canal. The annual increased production estimated from these improvements is 2.88 GWh at a levelized cost of 3.8 ¢/kWh. The annual cost saving associated with replacing this amount of production at Holyrood is \$544,000.<sup>5</sup> Comparing the levelized cost of production associated with the capital cost of the project to the current cost of production at Holyrood, the benefit to cost ratio for this project is 5.0.6

- 4. The Applications Enhancements project included in the 2013 CBA includes two items under the Customer Service System Enhancements project that are characterized as cost savings programs. One of these is the introduction of customer call-back technology, which will provide an expected cost saving of \$182,000 over the 7 year life of the technology and a benefit to cost ratio of 1.53.
- 5. The Applications Enhancements project included in the 2013 CBA includes a second item under the Customer Service System Enhancements project that can be characterized as a cost savings program. The enhancement planned for group billing will provide an expected cost saving of \$110,000 over the 5 year life of the enhancement and a benefit to cost ratio of 1.32.

See footnote 1.

See footnote 2.