Date: 4/11/2012 10:58:13 AM From: EMartin@nalcorenergy.com

To: "Charles Bown"

Subject: Fw: Need for Independent Financial Review to be tabled in the House!

Charles.

Here is the reply I sent to V. Young.

Ed

- Forwarded by Ed Martin/NLHvdro on 04/11/2012 10:57 AM -

From: Ed Martin/NLHydro

To: Victor Young <vidyoung@

Date: 04/11/2012 10:50 AM

Subject: Re: Need for Independent Financial Review to be tabled in the House!

Vic.

The numbers summarized in your table generally reflect the summary I sent you, reflecting information at Decision Gate 2, reasonable debt/equity assumptions, and excluding the impact of a Federal Loan Guarantee. In addition, as requested, here are some of my thoughts on your comments;

- 1. You use the phrase "high cost/high risk project" in your email. In relation to supplying the electricity needs of the Province, the descriptor of cost as high or low has to be considered in the context of a comparison to the alternative. The generation expansion plan for the power grid including Muskrat Falls and the Labrador Island Link is the lower cost alternative than an isolated island solution.
- 2. From a risk perspective, classification as high or low also depends on comparison to alternatives. The risks associated with the Isolated Island alternative are comprised primarily of the volatility and uncertainty of fuel prices over the long term, plus the capital cost risk of the construction required in the isolated island case. Muskrat Falls risk is primarily associated with capital cost. In addition, the risk identification and mitigation activities of each alternative also has to be understood prior to assigning an assessment of the level of risk to either, and reasonably comparing them.
- 3. I would also note that Muskrat Falls will not be redundant by 2041 when the power contract with Hydro Quebec expires. Muskrat Falls will be a long life hydroelectric asset that can provide a revenue stream for the Province regardless of the specific public power objectives of the Government of the day beyond 2041. Moreover, the Island Labrador transmission link will be about 50% paid off by that time frame which will be beneficial to Island consumers accessing additional sources of power in Labrador.
- 4. The financial criterion of payback is not particularly pertinent in utility least cost planning what matters is how much financial resources are required to reliably meet a forecasted load requirement under one supply option versus an alternative. This is the cumulative present value/worth analysis (CPW) carried out by Hydro's System Planning department. The long term generation expansion alternative with the lowest present value of costs is the preferred investment path for the utility to supply least cost power.
- 5. Regarding the financial implications to the Province, obviously suggest you give Tom Marshall a call to discuss. I note, however, that we work very closely with the Department of Finance, and they are part of our interactions with the financial markets, and the Province has their own financial interactions with the markets for their planning purposes. I also note that unlike Churchill Falls, Muskrat Falls is being developed for the existing and future electricity consumers of Newfoundland and not for an external customer like Hydro Quebec. Surplus power will be directed to export markets, facilitated in part by an exchange with Emera of power for export transmission capability. Once the Muskrat Falls plant is commissioned, all of the monies previously directed towards thermal power production, and the uncertainty and volatility of world oil prices, will in effect be re-directed to help fund local power sector infrastructure with known and stable costs that provide increasing economic value to local users over time.
- 6. Residents of the Province will pay out cash over their lifetimes for electricity. A Muskrat Falls/Labrador Island Link scenario means that this cash payout is made in the Province, for the benefit of future generations who will continue to enjoy and profit from an asset they own, with any available surplus revenue going to the Provincial Government to be invested further in NL. An isolated island future results in the majority of the cash payout accruing to oil companies outside of the Province, not for the benefit of NL.

Ed

From: Victor Young <vidyoung@

To: EdMartin <emartin@nalcorenergy.com>

Date: 04/10/2012 12:06 PM

Subject: Need for Independent Financial Review to be tabled in the House!

Hi Ed. Resending, in case you did not receive. I understand if you do not wish to reply but wanted to make sure you received. My expressed view regarding the need for an independent financial review is reinforced by the recent decision (or not) of the PUB and the decision of Government to hold a special debate in the House on Muskrat.

Warmest regards

Vic

Subject: Need for Independent Financial Review to be tabled in the House!

Date: Thu, 29 Mar 2012 13:26:20 -0200

Hi Ed. This is very helpful in wrapping my mind around the all important risks to the Province of proceeding. The attached is my rather simple summary, recognizing that all numbers are subject to change. Mentally, I add a 30% cost overrun (\$1.65 billion) and take off \$500 million for the anticipated federal 'guarantee equivalent' and come up with \$6.65 billion to be financed by the Province/Nalcor in the bond market or from budgetary surpluses over the next five or six years. In the end, it is the people's money that will be financing a high cost/high risk project which will not start producing power before 2016 and will be redundant by 2041...less than a 25 year life with probably a 50 year plus payback! These are the kinds of numbers that need public understanding and debate. I would appreciate your view on their general accuracy.

Given the magnitude of the numbers, it is imperative that the potential impact on the fiscal position of the Province be at the top of the decision making chain...even more important than power rates at this stage. It is the Province that needs the potential financial consequences independently assessed (independent from Nalcor) and it is this independent financial review that should be tabled and debated in the House of Assembly so that the people of the Province do not end up with a big negative fiscal surprise, as they did with Churchill Falls. Government must, therefore, be brutally frank and transparent about the potential fiscal risks and presumably Tom Marshall will start that process in his upcoming budget...just a personal view!

Vic

From: viclyoung@ To: emartin@nalcorenergy.com Subject: Source of Debt/Equity

Date: Mon, 26 Mar 2012 10:54:36 -0200

Thanks Ed. No need to apologize. Thanks for responding. I will rearrange the numbers to fit my understanding and check it out with you. I think it is confusing to be excluding/including IDC and people should be able to understand the total numbers, since IDC is a cost and has to be borrowed as well. I any event, I will drop you my view when I have had a chance to put it together. **As for my interest, it is totally and exclusively personally driven!**

Vic

Subject: Re: Source of Debt/Equity From: EMartin@nalcorenergy.com Date: Sat, 24 Mar 2012 12:24:58 -0230

To: viclyoung@

Vic,

First, I apologize again for the delayed response. I had asked for some data, received it, and failed to send it on - my fault! Here are the answers to your questions. For good form, I note this is indicative information being provided to you as an interested Newfoundlander, and not in any way related to banking connections you may have at a board of director's level. As you noted, the assumptions are not yet finalized, for instance the debt/equity splits are approximate. Also, still working the details of the loan guarantee with the Feds, however it is progressing. The example below does not include the benefit of a federal loan guarantee. All numbers in this example are approximate.

- 1. The total 6.2 billion number being used is in "as spent" dollars (that is, the numbers are in escalated dollars as spent, for instance, dollars spent in 2013 are in escalated 2013 dollars, etc, etc), not including interest during construction (IDC). For your general information, IDC has obviously been included in all financial analysis.
- 2. The 6.2 billion is comprised of 2.9 for the power site, 2.1 for the Labrador Island Link, and 1.2 billion for the Maritime Link.
- 3. Emera would finance the 1.2 billion for Maritime Link, and approximately 600 million of the Labrador Island Link, for a total of 1.8 billion of the 6.2 billion.
- 4. Nalcor would be responsible for financing the 2.9 billion for the power site and the remaining 1.5 billion of the Labrador Island Link, a total of 4.4 billion before IDC.
- 5. For this exame, assume the debt equity ratio for the power site is 60:40, and for the Labrador Island Link, Nalcor portion, 75:25.
- 6. Adding IDC to Nalcor's 4.4 billion brings Nalcor total, including IDC, to approx 5.5 billion (IDC will change as we are using older, conservative interest rate assumptions, and not reflecting the benefit of the federal loan guarantee). Applying the debt/equity ratios as noted results in approx 3.7 billion debt requirement and 1.8 equity requirement.
- 7. The 1.8 billion equity contribution is assumed in this example to be provided by the Province, and attracts an equity return which is included in the economics.

Ed

This Email was sent from a Blackberry wireless handheld. The Email, including attachments, is confidential and proprietary. If you are not the intended recipient, any redistribution or copying of this message is prohibited. If you have received this Email in error, please notify us immediately by return Email, and delete this Email message.

Frone Victor Young [viclyoung@ Sent: 03/08/2012 01:34 PM ZW3

To: Ed Martin

Subject: Source of Debt/Equity

Hi Ed. Thanks for all your previous answers to my string of questions...very helpful! I would like to understand how the whole project is going to be financed in terms of the total capital costs of the power site and the transmission lines; the debt/equity split in the financing of both; and the source of the debt and equity between the Newfoundland Government, Emera and Nalcor. Would it be possible to have someone lay this out in simple terms recognizing that the debt/equity split would be a best guess at this stage. I am also assuming that the form of the federal guarantee is still not finalized and this must be a source of some concern. Thanks.