From: **David Leather**

Tuesday, January 26, 2016 2:10 PM Sent:

To: David Steele; Tim Calver

Michael Kennedy Cc:

Meeting with Ed Martin Subject:

Nalcor CEO meeting 15 January 2016.docx Attachments:

David, Tim

As discussed last week, I attach my notes of the meeting with Ed for you to add to/amend etc.

Regards

David



David Leather | Partner | Advisory Ernst & Young LLP

100 Barbirolli Square, Manchester M2 3EY, United Kingdom
Office: +44 (0)161 333 2717 | Mobile: +44 (0)7766421800 | dleather@uk.ey.com

Website: http://www.ey.com

Nalcor - meeting with Ed Martin - CEO

15 January 2016

Meeting notes

EM wanted to both provide background information on the project and some wider context of Nalcor's growth opportunities.

Muskrat Falls

- 40% of power required for New Foundland consumption replacing existing power from ageing and relatively expensive sources
- 20% used by Emera
- remaining 40% can be sold into the North American market flowing out, via the Maritime Transmission Link (MTL) through New Brunswick

Nalcor will only pay for transmission through the MTL when they flow.

If the market price goes down temporarily – Nalcor could 'store' the water rather than sell it at a reduced price. (Practical limitations not discussed.)

The overall project was viable at a cost of \$6.2 billion without the benefit of 60% of the potential power generated being sold. The discounted reduction in the cost of power required by Newfoundland between the existing 45 year old assets and the Muskrat Falls project over 50 years is greater than \$6.2 billion. (EM indicated that the benefits should continue for 100 years but they had prudently only included 50 years of benefits.)

Nalcor does surveys of public support periodically – the latest results showed that:

- 65% of people support the project
- 20% oppose the project
- 15% have no preference

Given the age (45 years) of the existing assets supplying Newfoundland, doing nothing was not an option for Nalcor and the alternative to the Muskrat Falls Project would have been a combination of small hydro plants and gas turbines.

Compared to other alternatives EM indicated that the Project would provide \$61 billion of net cash flow benefits over 50 years. (This does not include any future benefits from the larger Gull Island project).

The Project is benefiting from the Canadian government's AAA credit rating. On a standalone basis the Province of Newfoundland and Labrador would have an A rating. The consequential difference in rates represents an interest saving to the project of \$6 -7 billion.

Risks

The delays in Astaldi's work will result in a significant delay in the completion of Muskrat Falls Generation. This could be up to 18 months beyond the end of December 2017 when all works should have been completed.

However, the only other contractor impacted materially is Andritz who are unable to commence the installation of their equipment in the Power House as a result of the Astaldi delays in its construction, which is still at a very early stage.

The North Spur stability had been considered to be a material risk to the project, but ED considers that the reinforcement work carried out should have nullified that risk.

The technology being used for the Muskrat Falls Project is proven and therefore not considered to be a risk but the transmission lines are very long and given the stage of completion risks to project schedule and budget remain.

The transition risks have been managed through the secondment of experienced Nalcor operational staff onto the Project Team.

The current cost estimate of \$7.653 billion includes unallocated contingency estimated by EM at approximately \$0.2 billion. (Confirmed post meeting to be \$178 billion at 30 November 2015.) EM indicated that in addition to whatever variance may arise as a direct consequence of the Astaldi negotiations, (for which he gave no indication of quantum), additional cost variances beyond this of up to \$200 million could potentially arise in addition to the available contingency being fully utilised.

With the benefit of hindsight EM agreed that ideally they would have included a greater risk allowance in the project budget relating to productivity issues, but the contingency level was influenced by the funding arrangements. (These require additional monies to be paid into an escrow account by the provincial Government. If the cost estimate increases above the original estimate of \$6.2 billion, an amount equal to the cost estimate increase, divided by the number of years remaining to completion, n has to be paid into the escrow account each year to ensure that the Province has sufficient funding available to complete the project. This is because the Canadian Government had to provide underwriting guarantees of \$5 billion in relation to the Provincial Government's bond issue for the project.)

Nalcor context

By 2019, Nalcor's net income is expected to be \$400 – 500 million per annum, compared to \$127 million in 2014 and only \$67.2 billion in 2004. Assets are expected to be \$15 billion in 2019 versus \$10.6 billion in 2014 and only \$2.2 billion in 2004.

The capital programme has increased from approximately \$30 million per annum to \$150 million per annum in the same period.

EM shared with EY the very significant potential returns from the oil reserves off the Newfoundland and Labrador Coast. Nalcor, which has majority ownership of the oil reserves has obtained the seismic data which indicates the extent of the opportunity. EM believes that on a prudent basis based on the projected cash flows, if Nalcor was a private entity, it would be valued at \$7-8 billion.