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From : "Bown, Charles W."

To : "Skinner, Shawn"

Cc : "Wardle, Richard"

Subject : Draft Briefing Note

Attachment : DG3 Review- Briefing Note draft4 (final).docx;

Minister;

As we have discussed previously, the Lower Churchill Project will require some form review and oversight to provide for ratepayer transparency into the project. Nalcor has prepared a draft note which highlights the following:

- The decision process for the next generation source
- A brief history of how previous projects were approved
- The scope of the Decision Gate 3 process, and
- Near-term undertakings that will be required of govt/shareholder to facilitate the project

I have also copied a response from Robert on the note to Nalcor. From this you will gain some insight into the discussion we have been having on the type of process we feel the project should go through to give the ratepayers a window on costs rates and processes.

Charles

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Derrick:

The note is very good. I have excerpted and summarized the core logic below to better understand it, and to test back with you whether we are on the same page. It also gives rise to two additional questions, at the bottom, which I am hoping you can answer.

I will give you a call later today to discuss further.

Robert

Why not have the project reviewed by PUB?

- A PUB review of any kind will require a delay in the project, perhaps by a year or so, to hold hearings, hire experts and prepare reports.
- By the end of June, 2011 a decision to address projected capacity deficits in 2015 is required. Under the Infeed Option the least cost method to address this deficit is to construct a 50 MW gas turbine as this provides sufficient capacity in the short term to meet utility standards until the Project is completed. Under the status-quo "Isolated Island" alternative this 50 MW gas turbine is not the least cost option as small wind and hydro on the Island which is more expensive in the short-term would be least cost if the Project was not developed. Lack of certainty in the Island supply selection process created by a PUB review of this decision could result in a sub-optimal choice, and thus potentially higher costs for ratepayers, being made to address the 2015 capacity deficit as each Island supply alternative has a different least cost solution to address this deficit.
- A one year delay will result in: termination of increased costs of contracts; loss of key project management team members; postponement of key project timelines - such as delivery of submarine cable. If this particular contract is not awarded by the end of 2011, which secures a delivery and installation date within the current project schedule, the delivery and installation of the cable could be significantly delayed.
- A one year delay would create significant regulatory risk in the assessment of financial institutions and it would prove impossible to obtain a credit rating for raising debt capital until certainty had returned.
- Without a credit rating it will be less likely that we can secure the federal loan guarantee. The federal government will argue that the PUB process creates the risk that Muskrat Falls will not even be built. Delay raises risk that the federal guarantee will not happen, thereby harming ratepayer benefits.
- A delay may cause a loss of the Emera contract and the associated financial and export benefits that accompany it.

But how can the public be assured that Muskrat Falls is the best choice for ratepayers? Where is the independent oversight?

- Nalcor has already provided and published significant quantities of its data, assumptions and analysis to the PUB, the Lower Churchill Panel and briefings for the Opposition parties, the media and the public. No other lower cost options have been advanced from any other party.
- In addition, as part of the process before final investment decisions are taken, Nalcor and the provincial government will be hiring an independent consultant to review the reasonableness and completeness of the long-term (~60 years) Island supply options considered; the reasonableness of the process followed to screen and evaluate the appropriate Island supply options; the assumptions used by Nalcor in assessing the Island supply options; and the recommended Island supply option. The report will be completed and made publicly available by July 1, 2011.
- The consultant will also be asked to complete the same assessment when the new engineering data becomes available, prior to final investment decisions being made on the project.

Can the public participate in this review?

Exactly what role will the PUB play? By what mechanism or directive will the costs of Muskrat Falls and the transmission project get absorbed into the rate base?

**Briefing Note**

(Draft – for discussion purposes only)

**Confidential and Commercially Sensitive**

**Title:** Muskrat Falls Decision Gate 3 Independent Review Process and A Summary of the Necessary Regulatory/Shareholder Undertakings Required to Progress the Lower Churchill Project.

**Issue:** Describe the necessary regulatory/shareholder undertakings required for the Lower Churchill Project (the “Project”) and identify the independent review as part of the Decision Gate 3 process that forms the basis of reasonableness for the Island Supply Decision.

The purpose of this briefing note is to describe the following:

1. An overview of the decision process required by Newfoundland and Labrador Hydro (“NLH”) with respect to the next source of Island supply;
2. An overview of the historical regulatory approval process for generation and transmission investments;
3. The Decision Gate 3 process and how independent reviews will comprise a key component of project sanction; and
4. The regulatory undertakings and other commitments required by Nalcor immediately to facilitate financing and the completion of discussions regarding a federal loan guarantee.

**Overview of Island Supply Decision:**

- Development of the Project is consistent with commitments made in the Energy Plan. The first priority is ensuring current and future power needs are met with environmentally friendly, stable, competitively priced power. To deliver on this priority, the Energy Plan states that development of the Project, including a transmission link between Labrador and the Island, must be considered in the context of Nalcor’s broader resource planning initiatives.
- In July, 2010 NLH submitted a Generation Planning Issues Report to the Public Utilities Board (“PUB”). The report signals a generation planning decision must be made by the end of 2010 for the appropriate planning, approvals and construction to take place to address a capacity deficit on the Island, which is projected to materialize in 2015.
- Nalcor evaluated the practical supply options to address this deficit and meet the Island’s long-term electricity needs. Nalcor determined that Muskrat Falls (“MF”) and a transmission link to the Island provide the least-cost solution and most environmentally friendly solution to meet these needs. Holyrood oil-fired generation will be replaced with electricity from the Project. The replacement of this facility will reduce greenhouse gas emissions by more than one million tonnes annually, eliminating the Province’s dependence on the supply of imported fuel and remove future volatility in electricity prices. The Project will also eliminate the requirement for additional fossil-fuel generation in the future and avoid associated emissions. The development

of MF will meet the energy requirements for both Labrador and the Island for the foreseeable future and will also provide sufficient capacity for future industrial developments in Labrador and throughout the Province.

### **Historical Regulatory Treatment of Generation and Transmission Projects:**

#### ***Legislation***

- The Electrical Power Control Act, 1994 (“EPCA”) requires that the PUB ensures that adequate planning occurs for the supply of electricity in the Province.
- The Public Utilities Act (“PUA”) empowers the PUB to approve capital and operating expenditures for utilities, including power purchase expenditures.
- Prior to 1994, the PUB did not pre-approve capital expenditures however the PUB maintained purview over the inclusion of the related costs in rates.
- Section 5.1 of the EPCA permits a direction to be made to the PUB as to rates policies by the Lieutenant-Governor in Council.
- Section 5.2 of the EPCA permits the Lieutenant-Governor in Council, for reasons of public policy, to exempt a utility from the EPCA requirements and a similar section of the PUA (section 4.1) permits exemptions to be ordered from requirements under that Act.

#### ***Practices related to Generation Additions***

- The history of the addition of new generating sources to the Province’s electrical system since the EPCA and the PUA became applicable to NLH, show that the provisions requiring PUB approval of planning decisions and related major capital expenditures for new generating sources have been used rarely.
- Two non-utility generators (Star Lake (15 MW) and Rattle Brook (4 MW)) from which NLH purchased power under a tendered bid issued in 1992, were the subject of specific legislative treatment under the Hydro Corporation Act (this treatment continued under the Hydro Corporation Act, 2007 under paragraph 15(3)(c)) under which NLH is specifically entitled to recover through rates the expenses incurred to purchase energy under these power purchase agreements (PPAs).
- Newfoundland Power added a small generating station (Rose Blanche, 6 MW) in 1998 but due to its small capacity and cost, this small addition of generating capacity did not trigger the PUB’s scrutiny from an overall planning role.
- The first major addition to NLH’s generating assets subsequent to the application of the EPCA occurred in 2000 when NLH’s Granite Canal project (41 MW) was made exempt from the EPCA and the PUA through an exemption order. This was largely because the requirement to add this

generating source to the system in time to meet NLH's needs could not have been made in the context of a full EPCA and PUA planning and capital asset hearing on the matter.

- The next two generating sources to be added to the electrical system were also the subject of exemption orders under the EPCA and PUA: the Exploits River incremental energy project at Grand Falls and Bishop's Falls carried out by Abitibi and Fortis; and the Corner Brook Pulp and Paper thermal co-generation project. All energy output from these projects was sold to NLH under PPAs. These projects were made exempt from the planning and rate recovery requirements of the EPCA and of the PUA by exemption orders issued under those Acts.
- In 2000, NLH was, through an exemption order, made exempt from the EPCA and PUA for all planning matters relating to the Project.
- In 2003, NLH was, through an exemption order, made exempt from the EPCA and PUA for all planning matters relating to a wind demonstration project (this project was, ultimately, not completed).
- Also in 2003, a general rates directive was made to the PUB that costs incurred by NLH with regard to projects for which directives to purchase energy were made, except for the Project, were to be recovered through its rates.
- In 2008 and 2009, respectively, NLH commenced energy purchases from the St. Lawrence and Fermeuse wind farms (each at 27 MW). These power and energy purchases are not the subjects of exemption orders and, therefore, in its next general rates application, NLH will justify these power purchase expenditures on their merits, based primarily upon their attractive energy costs.

#### ***Practices in other jurisdictions***

- In many other jurisdictions, the regulator has purview over the inclusion of generation and transmission costs in rates, whether by approval of the inclusion of the assets in rate base or by approval of supply agreements of the associated assets as a regulated cost for inclusion in rates.
- The Project is unique given the magnitude of the capital addition as compared to Nalcor's current balance sheet and the cash flow certainty required by non-recourse lenders for debt service. These lenders will require certainty of cash flows as they form the only basis of security/collateral in a non-recourse financing. Subjecting these cash flows to regulatory uncertainty will negatively impact the amount and cost of debt that will be borne by the ratepayers since the Project is unlikely to receive an investment grade credit rating in this instance.
- [Further research underway for specific examples of particular jurisdictions.]

#### **Decision Gate 3:**

***Process Overview***

- Nalcor's Decision Gate process is designed to ensure decisions are made at appropriate times, with the appropriate level of information, and at appropriate levels of expenditure.
- Nalcor's Decision Gate process focuses on key milestones to achieve gateway readiness and builds in "cold eyes" reviews at key decision points throughout the process.
- The Project recently passed through Decision Gate 2 ("DG2") which is Concept Selection. At that time, to select a preferred concept, Nalcor completed the appropriate activities and gathered the required information including but not limited to field work, engineering and design, finalization of Labrador Innu Impacts and Benefits Agreement ("IBA"), environmental assessment progression, execution of water management agreement, completion of the Emera Term Sheet, financing preparation and economic analysis.
- Decision Gate 3 ("DG3") which is Project Sanction requires the advancement of project activities and work streams to a level of progression which provides the certainty needed to sanction the Project (e.g. ratification of the IBA, receipt of environmental permits and approvals, completion of detailed engineering and design, financing certainty, finalization of definitive commercial agreements, etc.). The intent of DG3 is to validate the concept selected before committing the largest dollars.

***Independent Reviews***

- Standard Nalcor practice for the successful achievement of DG3 includes the following independent reviews:
  - ❖ Independent Project Analysis Inc. ("IPA") an international organization that specializes in the review of large scale projects;
  - ❖ Independent Project Review ("IPR") a group of subject matter experts who individually are recognized for their knowledge and experience in particular aspects of large scale project delivery and collectively can provide a thorough review and commentary on the readiness of the Project to proceed; and
  - ❖ An independent review of the reasonableness of Island supply decision as described below (the "Supply Decision Review").
- The Supply Decision Review will be conducted by an external consultant (the "Consultant") with a focus on the reasonableness of the Island supply decision. For purposes of clarification, the scope of the Supply Decision Review does not extend to a review of the financing decision or the monetization of the excess power.

- The Consultant will review and provide an opinion on the following:
  - ❖ Reasonableness and completeness of the long-term (~60 years) Island supply options considered;
  - ❖ Reasonableness of the process followed to screen and evaluate the appropriate Island supply options;
  - ❖ Assumptions used by Nalcor in assessing the Island supply options; and
  - ❖ Recommended Island supply option.
- To complete the necessary work to provide their opinion, the Consultant will complete their review using the following inputs:
  - ❖ necessary internal financial and engineering models, reports, and discussions with management and personnel;
  - ❖ the 2007 Energy Plan that forms the policy framework used by Nalcor in determining the Island supply option;
  - ❖ the Island supply option evaluation criteria used by Nalcor; and
  - ❖ generally accepted utility practices for the evaluation of Island supply options.
- The Island supply option evaluation criteria used by Nalcor are:
  - ❖ Security of supply and reliability;
  - ❖ Cost to ratepayers;
  - ❖ Environment; and
  - ❖ Risk and uncertainty.
- The Consultant will provide a preliminary draft report using final DG2 estimates by June 1, 2011. The Consultant will provide a final report using final DG3 estimates and assumptions prior to the conclusion of the DG3 process.
- Potential candidates for Consultant include:
  - ❖ NERA Economic Consulting;
  - ❖ Navigant Consulting;
  - ❖ Ernst & Young LLP; and
  - ❖ KPMG LLP.

Preferred candidate would be NERA Economic Consulting due to their knowledge of our regulatory environment and experience in providing independent review opinions (e.g. 2006 NLH marginal cost study, fairness assessment of the NB-HQ deal for the Province of New Brunswick, and acted as financial advisor for the Federal government in the NAFTA settlement discussions with Abitibi Bowater).

**Overview of Required Regulatory/Shareholder Undertakings:**

- Over half of the total financing for MF and the Labrador-Island Link (“LIL”) is expected to be provided by debt for which lender recourse is to only the project revenues, and not the assets or a guarantee by the Province. The remainder of the required financing will be provided by Provincial equity. All (for the LIL) or most (for MF) of the revenues for the Project arise from a regulated NL ratepayer obligation. The amount and cost of the debt financing (which in turn drive ratepayer costs) depend on the risks that lenders perceive; many of these risks can be dealt with through Provincial undertakings. Undertakings are being requested, which:
  - 1) Enable creditworthy revenue streams that;
    - Establish the ratepayer payment obligation – Creates certainty that costs and the return on rate base associated with MF and LIL assets will be recovered from a stable, regulated customer base;
    - Provide lenders with a clear line of sight to stable cash flows required for debt service - Inclusion of the costs associated with the MF Power Purchase Agreement (“PPA”) and LIL Transmission Services Agreement (“TSA”) in NLH’s cost of service is critical, as the related payments to the borrowing entities are the only form of security/collateral that will be offered to lenders (as described above);
    - Promote achievement of in-service and commencement of revenues for debt service - A contingent equity commitment provided by the Province assures lenders of project completion, even in the event of overruns or delays.
  - 2) Address risk and uncertainty that will arise if the PUB has influence over Provincial policy and other related matters (some of which are also critical for debt service), including:
    - The decision process for meeting Island demand requirements - i.e. selection of the MF + LIL versus Holyrood/Isolated Island option;
    - Recovery of full cost of service for LIL costs, and the NL ratepayer share of MF costs, from NL ratepayers;
    - Revenue from export sales being retained by MF to meet debt service obligations in order to recover the portion of cost of service not borne by NL ratepayers; and
    - Deployment of recall power from Churchill Falls once the Island is interconnected to Labrador.
  - 3) Address uncertainty surrounding the achievement of a timely MF/LIL financial close, in-service and/or recovery of costs from NL ratepayers which may impact Emera’s ability to obtain timely regulatory approvals and financing for the Maritime Link; and
  - 4) Support the achievement of a Federal Loan Guarantee - The Federal government, as potential guarantor of MF/LIL debt, will assess the creditworthiness of these projects in a manner similar to that of potential lenders.
    - Absence of appropriate Provincial supports for credit quality could provide the Federal government with an “out” on loan guarantees, and a loss of estimated benefit to NL ratepayers of \$640M.



- The finance-raising process has already commenced, one piece of which is engagement with the Government of Canada concerning a Federal Loan Guarantee. Nalcor plans to engage the financial markets next by seeking a shadow rating from the rating agencies in the May-July 2011 time frame (for the MF and LIL borrowing entities); this will be followed by resumed discussions of the Federal Loan Guarantee after the formation of a new federal government.
- These schedule-sensitive finance-raising steps cannot proceed without critical credit-worthiness elements in place. Provincial undertakings are a central component of this credit-worthiness.
- The implications of not proceeding with financing at this time are as follows:
  - Necessary financing activities will not be completed in order to support the Decision Gate 3 (Sanction) decision for MF in late 2011;
  - The Government of Canada will likely require credit ratings for the Project without a federal guarantee as one measure to assess credit worthiness. Unless the financing process starts now, then these credit ratings will not be available;
  - Receipt of debt financing will be pushed out further, thereby increasing the amount of up-front equity contributions required from the Province prior to putting financing in place.
- The specific requested undertakings and their impact on credit quality are provided below:

Requested Undertaking	Impact on Credit Quality
Approval for formation of new Nalcor entities	<ul style="list-style-type: none"> <li>• The contemplated structured debt will require special borrowing entities so that lender access to project cash flows is clear and unencumbered</li> </ul>
Inclusion of costs in NL rate base (including Emera's interest in LIL)	<ul style="list-style-type: none"> <li>• Revenues from the NL rate base provide the basis for debt service (all for LIL, most for MF)</li> <li>• Lenders will have recourse only to Project revenues, and not Provincial guarantees nor Project assets</li> </ul>
NLH sole authorized wholesale provider of electricity in NL	<ul style="list-style-type: none"> <li>• Absent appropriate undertakings, there is the potential that NLH supply (Island fleet plus MF) could be eroded potentially jeopardizing NLH's ability to meet its PPA and TSA payment obligations that are required by the MF/LIL borrowing entities to service debt.</li> </ul>
Provincial government indemnification and change in law provisions as part of lending agreements	<ul style="list-style-type: none"> <li>• Recognizing that future NL Legislatures cannot be bound, and is a customary provision where debt financing is sensitive to the legislative environment.</li> <li>• Provides reasonable compensation to lenders if future legislative acts threaten debt service.</li> </ul>
Borrowing limits for new and existing Nalcor entities	<ul style="list-style-type: none"> <li>• Provides new MF and LIL entities the authority to borrow funds required for construction of assets and provides existing entities, such as NLH, additional liquidity to meet obligations under credit-sensitive agreements (if required).</li> </ul>