

Date : 12/1/2011 9:07:02 AM

From : GBennett@nalcenergy.com

To : "Bown, Charles W."

Subject : thinking

Attachment : ATT2409404.gif;ATT2409405.gif;ATT2409406.jpg;

RECOMMENDATION NO. 4.1: Government Confirmation of Projected Long-Term Returns

The Panel recommends that, if the Project is approved, before making the sanction decision for each of Muskrat Falls and Gull Island, the Government of Newfoundland and Labrador undertake a separate and formal review of the projected cash flow of the Project component being considered for sanctioning (either Muskrat Falls or Gull Island) to confirm whether that component would in fact provide significant long-term financial returns to Government for the benefit of the people of the Province. Such financial returns must be over and above revenues required to cover operating costs, expenditures for monitoring, mitigation and adaptive management, and financial obligations to Innu Nation. The Panel further recommends that the Government of Newfoundland and Labrador base these reviews on information on energy sales, costs and market returns that have been updated at the time of sanction decision, and make the results of the reviews public at that time. The financial reviews should also take into account the results of the independent alternatives assessment recommended in Recommendation 4.2.

Responsibility: Government of Newfoundland and Labrador

□

The Panel recommends specific conditions on Government in its capacity as shareholder of Nalcor and as the entity with jurisdiction over Newfoundland and Labrador electricity policy.

Specific points:

- 1) The specific condition 'whether that component would in fact provide significant long-term financial returns to Government for the benefit of the people of the Province' ignores the public benefit provided by low cost energy. The word 'significant' is undefined by the Panel in this context.
- 2) This recommendation also applies to Gull Island, so Government should consider whether it is prepared to apply an export oriented project to an external review.
- 3) In its report, the Panel acknowledged Nalcor's expertise and experience in this area, but also stated that 'concerns were raised' by others. The Panel did not make a determination regarding the credibility of presenters and of the information presented, but nonetheless suggested that 'another review be undertaken.'

To the extent that export decisions are not regulated, the Panel appears to have exceeded its mandate by recommending that decisions that can competently be made by Nalcor management, its Board of Directors, and its shareholder, be subject to another level of 'independent review.'

Government will undertake a full financial review of the Project before sanctioning it to ensure that economics are satisfactory; this review will consider many of the topics and issues raised by the Panel as well as others.

Nalcor understands the intent of this recommendation is to confirm at sanction that Gull Island and Muskrat Falls are compliant with applicable energy policy, have acceptable risk, and will earn appropriate returns for the shareholder. Nalcor believes the objectives of the recommendation are being fulfilled by government and will be satisfied prior to project sanction.

RECOMMENDATION NO. 4.2: Independent Analysis of Alternatives to Meeting Domestic Demand

The Panel recommends that, before governments make their decision on the Project, the Government of Newfoundland and Labrador and Nalcor commission an independent analysis to address the question "What would be the best way to meet domestic demand under the 'No Project' option, including the possibility of a Labrador-Island interconnection no later than 2041 to access Churchill Falls power at that time, or earlier, based on available recall?" The analysis should address the following considerations:

- why Nalcor's least cost alternative to meet domestic demand to 2067 does not include Churchill Falls power which would be available in large quantities from 2041, or any recall power in excess of Labrador's needs prior to that date, especially since both would be available at near zero generation cost (recognizing that there would be transmission costs involved);
- the use of Gull Island power when and if it becomes available since it has a lower per unit generation cost than Muskrat Falls;
- the extent to which Nalcor's analysis looked only at current technology and systems versus factoring in developing technology;
- a review of Nalcor's assumptions regarding the price of oil till 2067, since the analysis provided was particularly sensitive to this variable;
- a review of Nalcor's estimates of domestic demand growth (including the various projections to 2027 in the EIS (2007, 2008, 2009 and the 0.8 percent annual growth to 2067 provided at the hearing);
- Nalcor's assumptions and analysis with respect to demand management programs (compare Nalcor's conservative targets to targets and objectives of similar programs in other jurisdictions and consider the specific recommendations, including the use of incentives to curtail electric base board heating, from Helios Corporation, among others);
- the suggestion made by the Helios Corporation that an 800 MW wind farm on the Avalon Peninsula would be equivalent to Muskrat Falls in terms of supplying domestic needs, could be constructed with a capital cost of \$2.5 billion, and would have an annual operating cost of \$50 million and a levelized cost of power of 7.5 cents per kilowatt-hour;
- whether natural gas could be a lower cost option for Holyrood than oil; and
- potential for renewable energy sources on the Island (wind, small scale hydro, tidal) to supply a portion of Island demand.

Responsibility: Government of Newfoundland and Labrador

□

This recommendation generally outlines the scope of the Navigant and PUB reviews; however certain specific recommendations appear to be inconsistent with Provincial electricity policy and with good utility practice.

In respect of the application of emerging technology and other technical points, the Panel lacks the subject matter expertise to make specific technical

recommendations to Government. No evidence was provided on the record to support a potential role for emerging technologies.

Government has previously and will continue to assess alternatives to meet future supply and demand through normal electricity regulatory processes.

The viability of renewables and natural gas, as well as assumptions for demand-side management were all previously considered in depth and included in planning and project assumptions.

As indicated in comments to recommendation 4.1, government will undertake a full financial review of the Project before sanctioning it to ensure that economics are satisfactory.

Finally, Nalcor defined the purpose of the project within the guidelines provided by the Canadian Environmental Assessment Agency.



Gilbert J. Bennett, P. Eng.

Vice President, Lower Churchill Project

Nalcor Energy

t. 709 737 1836 c. 709 691-7500 f. 709 737 1782

e. gbennett@nalcenergy.com

w. nalcenergy.com