

MINUTES OF THE FIFTY-THIRD MEETING OF THE BOARD OF DIRECTORS OF NALCOR ENERGY HELD IN THE BOARDROOM, SIXTH LEVEL, HYDRO PLACE, ST. JOHN'S, NEWFOUNDLAND AND LABRADOR ON THURSDAY, AUGUST 23, 2012 AT 9:00 A.M.

Present in Person: T. Styles, Chair
E. Breen
E. Martin
T. Clift
K. Marshall
G. Shortall
A. Hawkins
L. Abbass

Present by Invitation: D. Sturge, Vice-President and Chief Financial Officer
G. Bennett, Vice-President Lower Churchill Project

Secretary (acting): P. Hickman

696. CONSTITUTION OF THE MEETING

Notice for the meeting was forwarded to the Directors on August 14, 2012. A quorum being present, the meeting was declared duly called and validly constituted.

697. SAFETY MOMENT

Mr. Hickman provided a safety moment.

**698. LOWER CHURCHILL PROJECT DECISION GATE 3
CAPITAL COSTS**

Mr. Martin stated that the purpose of the meeting was to provide the Board with an update of Decision Gate 3 (DG3) Capital Costs associated with the Muskrat Falls Project. He emphasized that these would be the capital costs only and would not include any other costs associated with the Project. He stated that at

53rd Nalcor Energy Board Meeting
August 23, 2012
Page 2 of 6

this time they are still being finalized and are being presented to the Board for information purposes only.

Mr. Martin stated that at DG2 the Cumulative Present Worth (CPW) of the interconnected case (MF/LIL) was \$2.2 billion less than the CPW associated with the Isolated Island case. He stated that the CPW differential is now \$2.4 billion at DG3.

Mr. Martin then outlined to the Board the other additional benefits to the Province which would result from the building of Muskrat Falls Project. These include surplus energy sales revenue, increased tax income to the Province, various economic spin offs, industrial benefits, net dividends to Province, and avoided GHG costs.

Mr. Bennett then proceeded to make a presentation to the Board outlining the expected DG3 capital costs for the Muskrat Falls Project.

Mr. Bennett first of all outlined the methodology used to produce the estimates associated with the DG3 capital costs. Industry best practices were used, which involved frontend loading estimates to confirm project scope and align business objectives. Approximately \$250 million has been spent to date on the Muskrat Falls Project but this is in keeping with industry best practice of expending 4%-6% of total invested capital at this stage. Approximately 50% of engineering has been completed thus far, including most of the higher cost items.

Mr. Martin stated that in his opinion it is necessary to sanction the Project by October, as it is difficult to justify expending any additional monies after that date without the Project being sanctioned. He said that the Province is in agreement with this, but the date is at risk as discussions with the Federal Government with respect to the loan guarantee have to be completed prior to sanction, and may

53rd Nalcor Energy Board Meeting
August 23, 2012
Page 3 of 6

push the sanction date. He outlined to the Board the nature of these discussions with the Federal Government.

Mr. Bennett then reviewed the Project milestones. He noted that it is necessary to commence mass excavation at Muskrat Falls by November 2012 in order to commence the construction of the power house in the fourth quarter 2013 and keep the schedule of first power being produced by mid-2017.

Two key items that need to be finalized prior to there being Project sanction is that the loan guarantee with the Federal Government has to be finalized and the Province of Nova Scotia has to provide a completion guarantee to the Federal Government with respect to the Maritime Link.

Mr. Bennett reviewed information contained in the presentation relating to estimate accuracy. Mr. Bennett noted that significant engineering has been completed since DG2 and this results in less variability on the estimates.

Mr. Martin noted that the biggest risk to the cost of the Project is related to the labour productivity involved in the construction. However, he stated that Nalcor is doing all the right things to mitigate to this risk.

Mr. Bennett reviewed the engineering and design process related to the HVDC. He reviewed the transmission construction sequence as outlined in the presentation. Mr. Martin noted that a significant change associated with the transmission line is the decision to move from a 320 kV line to a 350 kV line. He stated that this is the prudent thing to do and is not something that should have been known at DG2, as sufficient engineering had not been carried out at that point in time.

Mr. Martin reviewed the Project definition for Muskrat Falls, as well as the engineering and planning process undertaken at both DG2 and DG3. He noted that the orientation of the dam has been changed since DG2 to make it more

53rd Nalcor Energy Board Meeting
August 23, 2012
Page 4 of 6

stable, as well as efficient for the divergence of the water. This has increased costs but will increase the efficiency and integrity of the plant.

Mr. Bennett described the construction sequence related to the Muskrat Falls Plant.

Mr. Bennett then reviewed the project definition for the Strait of Belle Isle crossing. He reviewed the estimating approach and the cost estimate components which included the base estimate, the estimate contingency and the escalation allowance.

The Board of Directors discussed its involvement in the approval to sanction the Muskrat Falls Project and its involvement subsequently, during the construction of the Project. Mr. Martin stated that he sees the Board as providing the approval to sanction the Project. This approval would involve the approval of the AFE for the full period of construction and the involvement of the Board after the initial approval would be if any significant issues arise which require the input of the Board, with regular project updates and presentations to the Board on an ongoing basis.

Mr. Shortall informed the Board that he met recently with the acting Manager of Internal Audit and they discussed the need for the Audit Committee of the Board to have oversight of expenditures, systems in place, etc. during the construction phase of the Muskrat Falls Project. Internal Audit will be involved in that aspect of the Project and will report to the Audit Committee in that regard.

Mr. Bennett reviewed some information included in the presentation outlining the key quantities associated with the Project. Mr. Martin emphasized that although the work relating to the estimate of costs has been very diligent, there are still risks due to the size of the Project. He then outlined to the Board the third party validation process that has been undertaken and is ongoing with respect to

53rd Nalcor Energy Board Meeting
August 23, 2012
Page 5 of 6

reviewing the methodology employed by Nalcor in arriving at the estimate of DG3 capital costs.

Mr. Bennett then review key drivers relating to the DG3 estimates and reviewed costs estimate changes since DG2.

Ms. Breen left the meeting at this time.

Mr. Martin noted that while the costs associated with the Muskrat Falls Project have increased since DG2, the Isolated Island option costs have also increased significantly since that time.

Mr. Bennett then reviewed several slides relating to various factors which have resulted in changes to the estimate from DG2 to DG3.

Mr. Styles inquired as to the status of the communication plan associated with the Project. Mr. Martin reported that Nalcor has developed a communication plan. It has been put in place and agreed to by the Province. The execution of the plan has commenced and will continue for several weeks.

699.

NEXT MEETING

It was agreed that the next meeting of the Board would be held on Friday, September 28th, 2012 in St. John's. It was also agreed that a visit to the Muskrat Falls site by the Board would be arranged within the next several weeks, prior to sanction of the Project.

Messrs. Martin, Bennett and Hickman left the meeting at this time.

700.

IN CAMERA

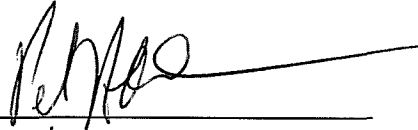
The Board held an in camera session.

53rd Nalcor Energy Board Meeting
August 23, 2012
Page 6 of 6

701.

TERMINATION

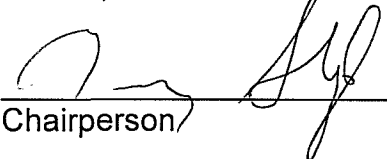
There being no further business, the meeting was terminated.



Secretary

Verified at a meeting held on

Sept. 28 2012



Chairperson

ACTION LIST
53rd Nalcor Energy Board Meeting
August 23, 2012

August 23, 2012	Schedule Board visit to Muskrat Falls site (Minute# 699.)	Corporate Secretary	Oct. 15, 2012
------------------------	--	----------------------------	----------------------