From: <u>Carla Russell</u>
To: <u>Brian Crawley</u>

Subject: Fw: Comments re MHI report

Date: Thursday, September 20, 2012 1:41:26 PM
Attachments: Untitled attachment 00060.png

Importance: High

Here are Steve's comments.

I will review this evening & get back any comments this evening or tomorrow morning.

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.

Steve Goudie

---- Original Message -----

From: Steve Goudie

Sent: 09/20/2012 01:32 PM NDT

To: Carla Russell
Cc: Auburn Warren

Subject: Comments re MHI report

### **Executive Summary**

line in second paragraph should read "....are largely used to provide reliability and capacity support to the system and would only be used when operational contingencies arose."

at end of second and third paragraphs, MHI could consider adding "dollars" after "2012".

# **Financial Analysis of Options**

page 67 last paragraph. It is **NOT** true that "..the capital investment outlay for the interconnected option is much greater than for the Isolated island option." At least it is NOT true in terms of in-service nominal dollars. Isolated is about \$14 billion and interconnected is about \$10 billion. However, the interconnected option entails much greater capital outlays in the near term than Isolated Island. To correct MHI's first sentence in the last paragraph on page 67, it should be changed as "......for the Interconnected option is much more concentrated in the early years than for the Isolated island option."

The reorg of this section has also created a flow problem on page 67, last paragraph. MHI state that in order to compare capital investment across options, the fixed charges and power purchase cost CPWs should be added together. However, the reader has no idea, as yet, that this is because the MF and LIL costs have been included in Strategist Power Purchase Costs. I suggest adding the following sentence **after the first sentence** in the last paragraph on page 67: "For analysis purposes, the revenue requirement costs associated with Muskrat Falls and the Labrador - island transmission link have been included under Power Purchases."

Page 71 Table 13: While MHI have correctly inserted the revised sensitivity results, where all utility capital and not just MF+LIL was subject to sensitivity analysis, they have not rebelled from the previous results and continue to indicate that "MF and LIL" are the subjects of the sensitivity results. For labels on # 5,6,7,8,9,10

this can be corrected by simply deleting "MF and LIL" in each sensitivity label.

Page 72 at the end of the first paragraph. We don't want to explicitly say that coal regulations will apply to Holyrood as that's not exactly how emissions were valued. Better to edit last sentence to read "...and it is anticipated that carbon emissions sourced to all thermal power plants will come under regulation in the future."

SRG



Stephen R. Goudie Manager Economic Analysis Investment Evaluation Nalcor Energy t. 709 737-1354

e. SGoudie@nalcorenergy.com

w. nalcorenergy.com

Carla Russell---09/20/2012 11:08:21 AM---Latest draft...when you get a chance can you let me know if you have any concerns? I think they need

From: Carla Russell/NLHydro

To: Steve Goudie/NLHydro@NLHydro

Date: 09/20/2012 11:08 AM

Subject: Fw: Final Draft: Decision Gate 3 Review of the Muskrat Falls and Labrador Island HVdc Link and the Isolated Island

options

Latest draft...when you get a chance can you let me know if you have any concerns? I think they need comments by tomorrow as they are finalizing...



Carla Russell, CA
Manager Financial Planning and
Investment Analysis
Investment Evaluation
Nalcor Energy
t. 709 570-5982 c. 709 746-0247
f. 709 570-5927

e.

<u>CariaRussell@nalcorenergy.com</u> w. <u>nalcorenergy.com</u>

This email communication is confidential and legally privileged. Any unauthorized reproduction, distribution or disclosure of this email or any attachments is strictly prohibited. Please destroy/delete this email communication and attachments and notify me if this email was misdirected to you.

---- Forwarded by Carla Russell/NLHydro on 20/09/2012 11:07 AM -----

From: Brian Crawley/NLHydro

To: Carla Russell/NLHydro@NLHYDRO

Date: 20/09/2012 11:02 AM

Subject: Fw: Final Draft: Decision Gate 3 Review of the Muskrat Falls and Labrador Island HVdc Link and the Isolated Island

options

Pls keep this strictly confidential.

Brian Crawley
Nalcor Energy - Lower Churchill Project
t. 709 737 - 1499 c. 709 725 - 9145
1.888.576.5454

This email communication is confidential and legally privileged. Any unauthorized reproduction, distribution or disclosure of this email or any attachments is strictly prohibited. Please destroy/delete this email communication and attachments and notify me if this email was misdirected to you.

---- Forwarded by Brian Crawley/NLHydro on 09/20/2012 11:02 AM ----

From: "Bown, Charles W." <cbown@gov.nl.ca>

To: <br/>
driancrawley@nalcorenergy.com>

Date: 09/19/2012 09:20 AM

Subject: FW: Final Draft: Decision Gate 3 Review of the Muskrat Falls and Labrador Island HVdc Link and the Isolated Island options

•

#### Brian

The Final Draft of the DG3 report is attached. MHI has requested that Nalcor perform a verification check based on technical comments provided to them.

# Charles

From: Paul Wilson [mailto:plwilson@mhi.ca]
Sent: Tuesday, September 18, 2012 11:44 PM

**To:** Bown, Charles W.

Cc: Allen Snyder (amsnyder@ ); Mack Kast (mkast@

**Subject:** Final Draft: Decision Gate 3 Review of the Muskrat Falls and Labrador Island HVdc Link and the Isolated Island options

Hello Charles, please find enclosed Final Draft 2 for review. I believe Nalcor also wanted one more verification check to ensure that I didn't miss anything from our last meeting in St. John's.

This version contains:

- All document references and bibliography removed except those that are publically available.
- All Nalcor's revisions noted at our last face to face meeting.

- CPW Results have been moved for clarity in section 4, the new sensitivities added, and supporting text amended.
- Some text has been added on the new GHG regulations and their relation to the CPW Carbon sensitivity.
- A new figure has been added on ice loading in the transmission line section and the dialog reworked as per Nalcor's suggestions.
- Minor wording corrections in the Executive Summary and Conclusions section.

I will have Gerry Proteau and Al Snyder to review their revisions once more to ensure that I haven't missed their suggestions, but I feel we are very close unless you or Nalcor identify any other issues.

I will send the a redline word version so you can see exactly what has changed in a separate email.

My regards,

# Paul Wilson, P. Eng.

Managing Director, Subsidiary Operations

Manitoba Hydro International Ltd.

211 Commerce Drive

Winnipeg, MB R3P 1A3

Canada

P: +1 204 989-1271

F: +1 204 475-7745

M: +1 204 510-1271

<sup>&</sup>quot;This email and any attached files are intended for the sole use of the primary and copied addressee(s) and may contain privileged and/or confidential information. Any distribution, use or copying by any means of this information is strictly prohibited. If you received this email in error, please delete it immediately and notify the sender." [attachment "Consolidated DG3 report (final draft2).pdf" deleted by Steve Goudie/NLHydro]