

Date : 9/20/2012 2:27:50 PM

From : "Bown, Charles W."

To : "Crawley, Brian (briancrawley@nalconenergy.com)"

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

Brian

Please see additional technical comments from Al Snyder. Please include in your technical due diligence of the MHI draft report.

Charles

From: AL SNYDER [mailto:amsnyder@██████████]
Sent: Thursday, September 20, 2012 6:31 AM
To: Paul Wilson
Cc: Mack Kast (mkast@██████████); Bown, Charles W.
Subject: Re: Final Draft: Decision Gate 3 Review of the Muskrat Falls and Labrador Island HVdc Link and the Isolated Island options

Hi Paul/Mack: OK after no Internet Access in Abuja yesterday and 4 hours sleep enroute to Paris, MY review is complete. the report has a very good start and an equally good conclusion. However there are some "holes" in the middle which need plugging if we are to be consistent. It is awkward to note them all but I will try.

p32 sect 2.3.1; 3-175MVAr synch condensers vs 3 - 150MVAr elsewhere.

p33 sect 2.3.2; para 2 "anticascading tower(s)"

p34 sect 2.3.4 3rd last line - add "the" branch filter level

2nd last line - add "is" disconnected

para 3; 2 - 150MVAr plus.....

para 4; strategies "and" communication

p35 "islanded operation" - have not used before - should define

p36 reword " There is a possibility that the values used in the estimate may be low, depending upon what assumptions were made by the potential suppliers"

reword which were " relatively" equal

sect 2.3.5 bullet 1, line 3 cascading tower(s)

p37 reword "Nalcor has advised that detailed design will be ongoing throughout the construction process."

p39 2.4.3 omit "as to project scope"

2.4.3 reword " a strategy to mitigate this by putting in place policies to attract skilled labour"

p40 reword "as straight as possible" with "minimize the distance between the source of generation at Muskrat Falls and the load centre at Soldier's Pond"

2.4.5 omit "Principal Design Engineer"

para 3 ; replace "best economical" with "most economical"

p42 last sentence reword " MHI concurs with the selection of the tower structure families and foundation solutions for use in the project"

p44 para 1 - reword "running from" to "connecting"

p45 add the word ...quality "and"

p46 . Selection.....end with a period (now that nitpickie)

We deote "16 weather zones" on page 43, "11 weather zones" on page 46??

p47 reword "along the Long Range.." with "through the LR.." or "in the vicinity of the LR "

reword "material caches "and"

reword "development of "an" access"

p48 reword "along" same as p47

p49 "meetings with Nalcor" omit remainder

spelling "in to " should be "into"

p50 is the though correct? think it should say. "The inclusion of the fibre optic cable would increase the costs of the submarine cable but improve....."

section 3.2 "All options.....here." OMIT

I need to go back into the report so will send and then forward remaining comments.

Al

From: "Paul Wilson" <plwilson@mhi.ca>
To: "Charles Bown (cbown@gov.nl.ca)" <cbown@gov.nl.ca>
Cc: "Allen Snyder (amsnyder@██████████)" <amsnyder@██████████>, "Mack Kast (mkast@██████████)" <mkast@██████████>
Sent: Tuesday, September 18, 2012 9:14:28 PM
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.

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