

**From:** jamesmeaney@nalcoreenergy.com  
**Sent:** Thursday, November 21, 2013 10:11 PM  
**To:** Xeno Martis; derrick sturge/nlhydro; auburn warren/nlhydro; rob hull/nlhydro  
**Subject:** Fwd: Way Forward with IE on Cost and Schedule

See note from Harrington at the bottom of this thread, in particular #2. If Canada agreeable to having FC as starting point for measuring cost overruns and they have "protection" with their equity pre-funding mechanism (which we will agree to), it would seem to me this might be a reasonable approach to try and get MWH aligned on schedule and cost. By all means let me know if anyone thinks otherwise.

Sent from my iPad

Begin forwarded message:

**From:** "James Meaney" <[JamesMeaney@nalcoreenergy.com](mailto:JamesMeaney@nalcoreenergy.com)>

**Date:** November 21, 2013 at 8:52:12 PM NST

**To:** "Paul Harrington" <[PHarrington@lowerchurchillproject.ca](mailto:PHarrington@lowerchurchillproject.ca)>

**Cc:** "Lance Clarke" <[LanceClarke@lowerchurchillproject.ca](mailto:LanceClarke@lowerchurchillproject.ca)>, "Gilbert Bennett" <[GBennett@nalcoreenergy.com](mailto:GBennett@nalcoreenergy.com)>, "Ed Bush" <[EdBush@lowerchurchillproject.ca](mailto:EdBush@lowerchurchillproject.ca)>

**Subject:** Re: Way Forward - Cost and Schedule

That was the one thought that crossed my mind as well....let me mull this over and perhaps have a chat with Xeno in the morning, as he had an "offline" chat with her this evening on trying to get a mutually acceptable resolution on the cost overrun pre-funding issue. Thanks

Sent from my BlackBerry 10 smartphone.

**From:** Paul Harrington  
**Sent:** Thursday, November 21, 2013 8:45 PM  
**To:** James Meaney  
**Cc:** Lance Clarke; Gilbert Bennett; Ed Bush  
**Subject:** Re: Way Forward - Cost and Schedule

For me the only risk to sharing this with Alison is the potential slightly higher number than the \$6.531b number ...if we all feel comfortable with that as a potential outside number for MWH to deal with them we are ok

Paul

Sent from my iPad

On Nov 21, 2013, at 7:16 PM, "James Meaney" <[JamesMeaney@nalcenergy.com](mailto:JamesMeaney@nalcenergy.com)> wrote:

Hi Paul

Seems like a logical approach to me to try and bring these issues to ground in a short time frame. Do you have any concerns with me sharing this note with Alison to ensure alignment?

Thanks

Jim

Sent from my BlackBerry 10 smartphone.

**From:** Paul Harrington  
**Sent:** Thursday, November 21, 2013 5:51 PM  
**To:** James Meaney  
**Cc:** Lance Clarke; Gilbert Bennett; Ed Bush  
**Subject:** Way Forward - Cost and Schedule

Jim

Here are my thoughts that perhaps you can run passed CCB and BF to see if we are aligned.....

The cost and schedule experts will get lost in the minutae and will not be able to agree so we have to raise the discussion and this is what I propose:

1. Schedule - I have asked Ed Bush to work with Tom Chudy to develop a Critical Path overview which should allow MWH to make a determination on the reasonableness of the sequence, duration and interdependencies of the main works - LTA and LIL can be discounted from the discussion because they have months of float - the Critical Path for this Project has always been MF The high level CP for Muskrat Falls will show the main contracts , Bulk Excavation, Main civil , Dams and North Spur with the tie ins for the key supply and install contracts of Gates, TG sets and Balance of Plant . We can include the proposed Astaldi high level schedule that we have with the LD dates and shoe River Diversion as the main pivot point. MWH have a lot of experience and should be able to assess this level of schedule as being reasonable stating their assumptions in arriving at that opinion.
2. Cost - We know we have approx 2/3rds of the total Project estimate firmed up as completed contracts, delivered Po's or firm priced executed contracts or LNTP's. The net effect of this is a cost increase of ~5% which results in the \$6.531B - so there is \$2.2B left to firm up with contracts and PO's - the cost to complete as far as we know today is \$6.531B and we believe that the greatest budget hits are already behind us and even if in the worst case the 5% increase in cap cost we have seen continues to be experienced for the next \$2.2B (which we do not expect at this time) the \$6.531 would not exceed \$6.641. So we are now out of the realm of estimating theory and into the world of fixed and firm contract and PO costs. So MWH can be assessing actual fixed and firm costs that we have and then focus on the costs we have yet to firm up and again using their experience look at the cost situation and pass an opinion on the reasonableness of our revised budget of \$6.531B

If we take this simplified but practical approach to what we are looking for from MWH's test of reasonableness we should be able to satisfy the stated requirement and allow MWH to comment on the reasonableness of the LCP Cost and Schedule

**Paul Harrington**

**Project Director**

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