

From: pharrington@lowerchurchillproject.ca
To: [Lance Clarke](#); [Jason Kean](#); [Ron Power](#); [Brian Crawley](#); [Scott O'Brien](#); [Darren Debourke](#); [Greg Fleming](#)
Subject: Letter to Stan Marshall
Date: Saturday, June 4, 2016 5:02:58 PM
Attachments: [.png](#)
[To Stan Marshall.docx](#)

I have drafted a letter to Stan Marshall that I would like to send latest Monday June 6th . I have tried to capture in a few pages my concerns about the way the Project team is being treated and some concerns I feel duty bound to raise.

I have included some facts about the Sanction QRA and the P75 prediction of a 79 months duration for the Project and how the latest QRA still shows a P75 of 79 months. Jason , I would like to include the same thing for cost if that could be produced.

I would appreciate your feedback and suggestions to the text and any contributions you would suggest.

Regards Paul



To Stan Marshall.docx

Paul Harrington

Project Director (Consultant to LCMC)

PROJECT DELIVERY TEAM

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To Stan Marshall

From Paul Harrington

Date 4 June 2016

Subject Serious Concerns

Stan

I am writing to you in my current capacity and duty as the Lower Churchill Project Director. I feel compelled to provide you with my opinion on some serious matters that can negatively impact the completion of the Lower Churchill Project. I am sending you this note based on my 35 years of experience in Construction of major projects in an Owners Project Management team and I do so with the utmost respect.

The morale of the Project team has been seriously damaged by critical statements from Government and leadership. The Project Team has endured much criticism for many years by critics of the Project, much of this criticism has been personal and Gilbert Bennett has been the target of most of these personal attacks and recently we have seen those attacks and criticisms being directed at the Project Management Team. The Project Team were able to withstand the negative statements in the media and by persons and groups using social media because they had the support of Government and Nalcor Leadership. They now feel abandoned by Government and Leadership and feel that they are being painted as scapegoats for the decisions that were made by previous administrations. For example the project schedule at Project Sanction, the quantitative risk analysis (QRA) that was carried out on the Project schedule resulted in a P75 of 79 months from Project Sanction to First Power, the recently completed QRA resulted in the same result, a P75 of 79 months from Project Sanction to First Power. However the direction that was provided to the Project Team was to set a very aggressive schedule with a Target that was recognized as being in the P5 to P10 range. So the Project team identified the risks to the Project Schedule but was held to an almost impossible probability of achieving the published First Power date. So the criticism that the Project Team failed to manage the schedule is an unreasonable accusation based on the data available. (see Appendix 1)

The Project Management team consists of many talented Newfoundlanders and Labradorians (approximately 85 to 90%of the total team), experienced and very committed engineers, project managers and specialists in all disciplines and functions who are performing to the very best of their ability and are achieving many successes, however they are also being held responsible for matters which are clearly outside of their control and jurisdiction. It is unfair for them to be vilified and criticized for simply doing their job, they need to be encouraged and supported rather than undermined and castigated.

The Integrated Project Management team has been subject of many reviews, Navigant, Manitoba Hydro International (twice) , the 3 major rating agencies, NRCAN , MWH and the Independent Engineer,

Independent Project Analysis (IPA), and EY who carried out the most recent review. All reviewers have agreed that the Project Management team is well organized, following best practices and is working diligently to complete the Project safely within the approved AFE and Schedule. I understand from some discussion with Gilbert Bennett and John Mac Isaac that it is your stated intention to break up the integrated team and have two separate and distinct teams reporting respectively to Gilbert Bennett (Generation) and John Mac Isaac (LTA/LIL). I respectfully request you consider my concerns regarding the timing of such a change in the Integrated Project Management organization. I am providing these concerns because I feel that the implications, consequences and increased risk to both project cost and schedule may not be fully appreciated. My primary concerns are as follows:

- Impact on organization – I know that a number of key leaders in the Transmission and HVDC project management team will feel that this is a premature change and will have a disruptive effect on the remaining work. There will be attrition of some key leaders, loss of project knowledge and an overall demoralization of the remaining team. Productivity will be impacted and the Contractors will take advantage of the disruption and loss of Project knowledge to file Claims that without that Project Knowledge will be more likely to be successfully prosecuted.
- Increased Risk LIL – the current QRA assumes that the integrated Project Management team is in place until Turnover of the facilities to the Operating entity. In my opinion the LIL cost QRA P75 of \$300M will be increased to approximately \$500M and the current QRA P75 schedule of 7 months will be similarly impacted by a further 3 months.
- Increased Risk Generation – the attrition of some key leaders in LIL will cause others in the Team to consider their position and the potential loss of Project knowledge regarding the Astaldi file will be substantial – for example the negotiation with Astaldi in an effort to seek a negotiated settlement will be severely compromised if key players walk. If no negotiated settlement is achieved then the change-out and legal actions will require all our project knowledge and resources

I believe these organizational impacts, disruption and increased cost and schedule risks can be avoided by deferring the break up of the integrated Project Management until the Labrador Island Link is constructed, and turned over to the Operating Entity. That would be a 16 month stay of that decision and allow the work to be finished with the current teams with minimum disruption. I fully agree with the Transmission /Generation split post project and feel that the emphasis needs to be placed on the readiness of the operating entity to take over the LIL assets because Operations are currently not organized and prepared for the addition of 1600 kms of transmission, three major switchyards and a completely new HVDC technology.

I also feel duty bound to share some relevant facts regarding SNC –L and the reasons why we were obliged to move to the Integrated Project management model in 2012. To put it bluntly SNC-L did not perform, significantly increased the number of hours that they bid for and were awarded the EPCM contract, were not aligned with Nalcor and were deficient in almost all aspects other than Engineering. If we had not taken the steps we had with SNC-L we would not have had the access road completed to the site, we would not have had the Camp available and the mass excavation would not have been completed on time. We will provide you with a comprehensive report of the issues we faced with SLI

and their failures that led to our decision to move to the integrated Project Management model. It is also worth noting that the Independent Engineer (IE) and Canada fully endorsed the decision to move to the Project management model we currently follow and may even raise that with you during the meetings in Ottawa. Independent Project Analysis (IPA) carried out a mid project review in December 2015 and the Project Management team scored highly in Project Team effectiveness (see Appendix 2). IPA also noted that the Project Team is following best practices and they consider an integrated Project management team as being the most effective way to manage large complex projects. It is for the above noted reasons that the inclusion of SNC-L in the review being carried out by John MacIsaac and his team is causing great concern within the Project team who lived through the period where SNC –L basically let the Project down and caused much friction and resentment . One of the SNC-L team who is part of their review team was dismissed by the Project Manager for the HVdc team and consequently his presence back on the Project is not appreciated.

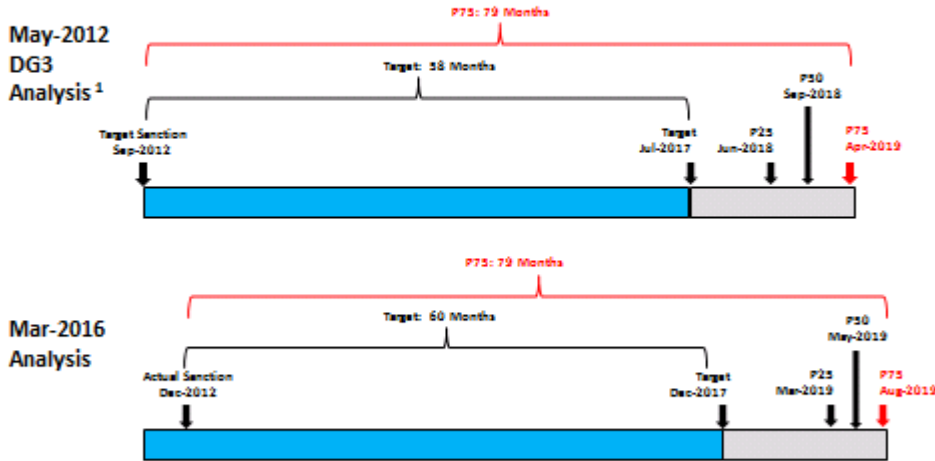
In conclusion I hope I have clearly articulated my concerns and trust you receive them in the honest and sincere manner in which they are being delivered. The Project team has faced many challenges and have overcome each and every one because we had the confidence of Nalcor leadership. I have persevered through the many Project adversities because I have a great team reporting to me of dedicated professionals. I hope we have your confidence and support to finish what we started as a team and trust that I can speak openly to you on important matters such as these. I know that your days are full and I have taken the step of writing to you in anticipation of a face to face meeting at some time at your convenience to discuss these matters further .

Regards

Paul Harrington

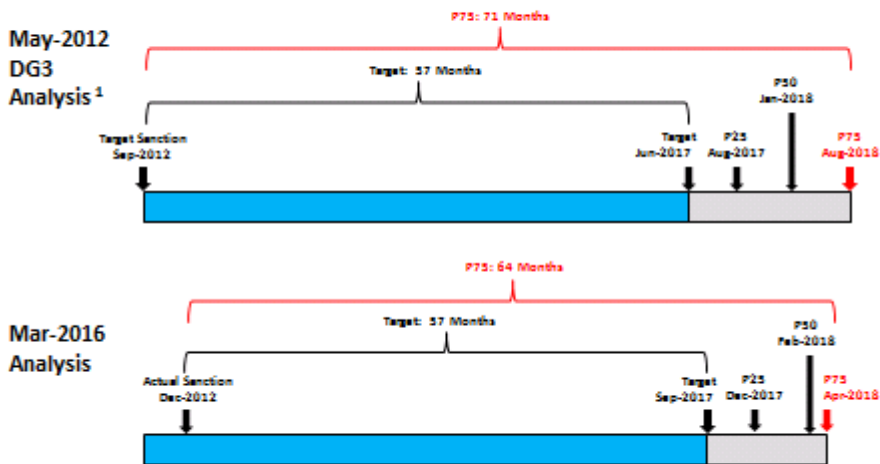
Appendix 1

Muskrat Falls First Power Duration Mirrors our 2012 Projections



¹ Source: Decision 8416-8, Project Description/Initial Full Analysis Report, Document ID: ICF-19-00-001-114-000-001

Effective Management successfully reduced LTA – LITL First Power Transfer by 7 Months



¹ Source: Decision 8416-8, Project Description/Initial Full Analysis Report, Document ID: ICF-19-00-001-114-000-001

Appendix 2



**Mid-Execution Assessment
Nalcor Lower Churchill Project**

**Presented to Lower Churchill Project Team
Félix Parodi and Lucas Milrod
December 2015**