14 February 2018

Commission of Inquiry Respecting the Muskrat Falls Project

5th Floor, Suite 502, Beothuck Building

St. John's, NL, A1B 3Y8

Dear Sir/Madam:

Comments on the Commission of Inquiry Respecting the Muskrat Falls Project Terms of Reference.

I have chosen to comment on selected portions of the Commission's Terms of Reference. There is an aspect of the project that I feel has been overlooked and/or not understood by the writers of the T of R. This aspect is the significance that engineering plays in the work carried out by NALCOR in the conduct of its business. The company employs numerous human resources engaged in this profession, the majority of whom are professional engineers. Others are, at this time in their careers, graduates of accredited engineering programs on their way to be coming registered professional engineers authorized to use the designation P.Eng. In addition to not being directly addressed anywhere in the context of the work at NALCOR it is disconcerting to find that "engineering" only appears once in the T of R (Item 8), in a summary of expertise that the Commission might utilize in the conduct of the Inquiry. The impact at NALCOR, of professional engineering and its utilization of industry based best practises and its adherence to ethical standards of practise is not directly brought under scrutiny by the T of R. This I view as a short coming in the T or R. I encourage the Commission to focus questioning in this area so as to identify the role of professional engineers in the thinking and deliberations that occurred at NALCOR in the led up to sanctioning of the project by government.

Item 4 (a):

The wording of this item is poorly structured so much so as to defy easy interpretation. My interpretation of this item: "the consideration by NALCOR of energy generation options that could meet

the forecasted electricity demands by NL's Island electricity grid customers. The engineering and economic evaluation of the options provided a firm direction for NALCOR to decide to recommend to government that it give official permission to NALCOR to proceed with the Muskrat Falls project."

Item 4 (a) Sub (i):

Likewise this item is poorly worded. My interpretation of this item is: "the assumptions (poor word to use in this context) or electricity demand forecasts on which the engineering and economic analysis of the above options was based were deemed to be reliable and based on current demand forecasting methodologies and up-to-date demographic and provincial economic information"

The forecasting methodology used by NALCOR should be vigorously investigated. What pertinent factors were used in developing its forecast. It should noted that the load forecast used leading up to DG2 was based on two year old data. The load forecast should have been based on influencing factors such as:

- 1. Ongoing energy conservation programs
- 2. The impact of heat pump technology.
- 3. Future impact of net zero residential construction in the province.
- 4. Declining population on the Island
- 5. Declining birth rates on the Island
- 6. The general aging of the population
- 7. Future of the potential for large industrial projects.
- 8. Potential for closure of the Corner Brook paper mill.
- 9. Housing starts (or lack thereof)
- 10. Population transfer to NE Avalon

Item 4 (a) Sub (ii) and (iii):

In my view Sub Items (ii) and (iii) are superfluous to the T of R in light of the questions that are asked in Item (a) and Sub Item (i). These two items (ii) and (iii) are asking the same question posed in Items (a) and (i) in different ways and could cause the Commission to waste time and resources on a treadmill that will just lead back to the beginning which is Item (a) and (i). It is my contention that conclusions relative to these two items will be clearly apparent to the Commission if it conducts a thorough investigation of the questions posed by the first two items of T of R Section 4.

If these questions must be pursued then there is an "elephant in the room" factor that arises with respect to these two items. On March 30, 2012 when the Manitoba Hydro International report was issued to government by the Public Utilities Board - the PUB could not conclude whether or not the Muskrat Falls project was the least cost option. There was not sufficient information supplied by NALCOR and that which was supplied was late and there was insufficient time for the PUB to conduct its work in order to meet the deadline imposed by the government. The PUB asked for more time but was denied. At DG2 the project was still in the concept stage. On page (iii) of its report to government, the PUB states that there is insufficient evidence presented by NALCOR to conclude that the Interconnected project is the least cost option. Despite the damming comments by the PUB on page (iii) and subsequent pages, NALCOR proceeded on with detailed engineering. Despite the significant complexity and scope of this project, and its significance to the province and Canada, a mere eight months later on December 17, 2012, the Provincial Govt officially sanctioned the project and authorized NALCOR to proceed.!

In that time frame NALCOR (and its partners) fully developed the details of the power house, the 1100km transmission line to the Avalon; the Maritime link; the integration of the system with the existing grid and a host of other side projects. It is inconceivable to me, on a project of this scope and complexity, involving building massive infrastructure in a wilderness environment, that this amount of work and associated project management plans could be completed in that period of time. I contend that the Commission should investigate the work activity that occurred during this period within NALCOR and its

partners and clarify the degree of completeness of the work and the quality of the cost estimates when the government sanctioned the project in Dec. 2012. What was the big rush?....and why was the scheme pushed forward so quickly and for what reason?

I wish the Commission of Inquiry the best of success in the process of its deliberations. I hold a very pessimistic view of the project and I fear greatly for the impact that the costs will have on the province and its people for generations to come. I trust that you can arrive at conclusions that point to the processes and political environment that permitted this to occur.

Yours truly,

R.F Davis, P.Eng.

St.John's NL

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