**From:** Paul Wilson
**Subject:** MHI visit schedule
**Date:** Thursday, May 31, 2012 12:50:06 PM
**Attachments:** Letter - G Bennett - 31 May 2012 R1.pdf

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Hello Gilbert, please find a tentative visit schedule to Nalcor for MHI staff. Details along with requested known information are included. Please confirm the availability of staff as soon as possible (latest June 4th) so that I can make the necessary travel arrangements.

My regards,

**Paul Wilson, P. Eng.**
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31 May 2012

G. Bennett
Vice President, Lower Churchill Project
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**Re: MHI Visit Schedule to Nalcor**

Dear Gilbert, please find the tentative schedule for MHI's staff visits to Nalcor as part of the Muskrat Falls Decision Gate 3 review for the Government of Newfoundland and Labrador – Department of Natural Resources. Please confirm the availability of staff by Friday morning June 4th, 2012 so that flight and accommodation arrangements can be made. I have included some notes on information that would be requested at those meetings. This is not an exhaustive list and additional information may be requested if material relevant to the analysis of the CPW of both options is identified in those meetings. These meetings will be used to brief MHI staff on the data, assumptions, details, etc. particularly if written studies or reports are not available.

## Meeting Schedule

**Labrador Island HVDC link Transmission Lines** (Task 5) – G. Proteau June 7th, 2012. June 8, 13-15, 21-22 are also reserved for follow-up if required. The exact schedule will be determined at the initial meeting and is dependent on data and Nalcor staff availability.

Documents requested to include all design drawings, preliminary client review document from consultants, reports completed to date on the HVDC transmission lines, AC collector system, and electrode lines.

- Route selection and alternative routing studies. Information on route survey techniques
- Conductor optimization study
- Structure optimization study
- Selection of insulator details
- Selection of hardware details
- Electrical studies
    - Magnetic & electrical field, radio & audible noise
    - Grounding requirements & designs proposed
- Selection of foundations and anchor types for all terrain types including discontinuous permafrost zones

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- ROW width calculations
- Tower spotting methodology and tower utilization targets for structure families
- Selection of design criteria (loads, clearances, reliability level, weather cases, wind induced motion effects)
- Selection of clearances (ground, structure geometry)
- Material estimating, tendering process, vendor qualification & inspections
- Tower testing plan
- Project costing, assumptions affecting market costs and risks. Assumptions used for line component costing
- Construction plans, schedules and cost estimates
- Transmission line emergency response preparedness or disaster recovery plans
- Designs for transmission line maintainability

**Load Forecast** (Task 1) – Craig Kellas June 13th, 2012. June 13-15th are also reserved for follow-up if required.

Data requested to be made available for this meeting:
- Updated 2012 Load Forecasts for each option
- Input assumptions and supporting data

**Muskrat Falls Generating Station** (Task 3) – Tom Moffat June 13th, 2012. June 13-15th are also reserved for follow-up if required.

Data requested to be made available for this meeting:
- Muskrat Falls GS current basis of design
- Muskrat Falls GS updated design data and information including AC switchyards and transmission lines to Churchill Falls
- Muskrat Falls updated master cost estimate
- Muskrat Falls updated high level master project schedule

**Labrador Island HVDC Converter Stations** (Task 4) – Les Recksiedler and Pei Wang June 13th, 2012. June 13-15th are also reserved for follow-up if required.

Data requested to be made available for this meeting:
- DC project definition
- single line diagram
- HVdc updated master cost estimate
- HVdc updated master project schedule
- Shore electrode cost estimates
- Construction schedules

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**AC Integration Study** (Task 2) – Dr. David Jacobson June 21st, 2012. June 22nd is reserved for follow-up if required.

Data requested to be made available for this meeting:

- Labrador Island HVDC System AC Integration study

**SOBI, Thermal Stations, Wind farms, other items** (Task 6 & 7) – Al Snyder June 21st, 2012. June 22nd is reserved for follow-up if required.

Data requested to be made available for this meeting:

- Marine crossing capital cost estimates
- Marine crossing master project schedule
- Changes in other cost items between DG2 and DG3 along with supporting information to explain the changes in costs.

**CPW Evaluation and Sensitivities** (Task 8) – Mack Kast June 25th, 2012. June 26-29th is reserved for follow-up if required. July 26th and 27th, 2012 is reserved to review the outcomes of Nalcor's sensitivity analysis.

Data requested to be made available on or before for this meeting:

- Generation master plan for both Options
- Revised CPW calculations with full reconciliation to Decision Gate 2 CPW calculations
- Revised escalation and discount rates
- Revised reference, high, low, expected fuel forecast
- Any revisions to Capex and Opex cost elements

Note that this schedule is tentative and Nalcor staff availability needs to be confirmed by June 4th, 2012.

MHI looks forward to meeting with yourself and your staff.

My sincerest regards,

Paul Wilson, P. Eng.
Managing Director, Subsidiary Operations

cc: C. Bown

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