

IN THE MATTER OF the *Public Utilities Act*, RSN 1990, Chapter P-47 (the “Act”): and

IN THE MATTER OF a General Rate Application (the Application) by Newfoundland and Labrador Hydro for approvals of, under Section 70 of the Act, changes in the rates to be charged for the supply of power and energy to Newfoundland Power, Rural Customers and Industrial Customers; and under Section 71 of the Act, changes in the Rules and Regulations applicable to the supply of electricity to Rural Customers.

IN THE MATTER OF the *Electrical Power Control Act*, 1994, SNL 1994, Chapter E-5.1 (The “EPCA”) And The Public Utilities Act, RSNL 1990, Chapter P-47 (The “Act”), As Amended; And

IN THE MATTER OF An Investigation And Hearing Into Supply Issues And Power Outages On The Island Interconnected System.

REQUESTS FOR INFORMATION

THE NEWFOUNDLAND AND LABRADOR PUBLIC UTILITIES BOARD

GRK-NLH-76 to GRK-NLH-92

GRAND RIVERKEEPER LABRADOR INC. (GRK)

Issued January 12, 2015

GRK-NLH-76

Re: Supply Issues and Outages Review ("the Liberty Report"), s. 6 (Conservation and Demand Management), pp. 27-30

Preamble: The referenced section indicates:

- that NP and NLH offered CDM programs from 2009 through 2013 that were largely successful (p. 28). It appears, however, that these programs ended in 2013;
- That the 3-year Industrial Energy Efficiency pilot program started in 2010, and was closed to new applicants in 2013 (p. 29);
- That a consultant found that the program had met or surpassed all 2012 participation and savings goals, and made recommendations to improve the programs;
- That Hydro and NP "Hydro and Newfoundland Power plan to retain a consultant to conduct a study of the current potential for conservation and demand management potential, in order to identify 'remaining achievable, cost-effective, electric energy efficiency and demand management potential.' The planned study scope includes modeling baseline consumption, identifying technology options, and assessing economical potential for all customer sectors. Hydro anticipates consultant selection by November 2014 and report completion by the end of 2015."
- That Hydro and NP "plans to retain a consultant in the fall of 2014 to review the marginal study last undertaken by an outside firm in 2006. The Company anticipates that a more comprehensive, 2015 marginal costs analysis will follow this initial review."

Please confirm or correct the statement in the first bullet of the preamble that the CDM programs offered by NP and NLH from 2009 through 2013 have ended. Please describe the steps to be undertaken for the design, approval and implementation of new CDM programs, once the potentials study referred to in the fourth bullets of the preamble and the marginal costs analysis referred to in the fifth bullet have been completed.

GRK-NLH-77

Please provide Hydro's best- and worst-case estimates of the time required for carrying out these steps.

GRK-NLH-78

Please explain why Hydro has waited until now before initiating the types of studies mentioned in the preamble to GRK-NLH-76 or other planning efforts leading to a new CDM program to replace the one that ended in 2013.

GRK-NLH-79

Re: Table 2.8 (p.30 of Liberty Report)

Please indicate if the MWh savings indicated in the right-hand section of the table are cumulative, or represent year-by-year incremental savings. If the figures provided are incremental, please provide a table indicating cumulative MWh savings, indicating and taking into account the assumed persistence of these savings for the period 2014-2019. If the figures provided are cumulative, please explain why the savings for Windows and Thermostats fell from 2012 to 2013, and why there was no persistence of the very substantial industrial savings achieved in 2012.

GRK-NLH-80

Please provide incremental and cumulative MW savings resulting from Hydro's CDM efforts 2009-2013.

GRK-NLH-81

Re: Liberty Report, Conclusion 2.21 (pp. 33)

Citation:

Thus, without being critical of efforts that have been undertaken, it is clear that a focus on demand (versus energy) reduction has particular importance. A variety of efforts planned for this upcoming year recognize the need to add that focus. We underscore the importance of promptly and comprehensively pursuing them.

Preamble: It appears that Hydro has little experience with respect to CDM programs focussed on demand reduction.

Please confirm or correct the affirmation in the Preamble.

Given its limited experience in capacity-focused CDM, how will Hydro proceed in order to develop aggressive and cost-effective demand reduction CDM programs as quickly as possible?

GRK-NLH-82

Re: Liberty Report, Conclusion 2.22 (pp. 33-34)

Citation:

2.22. History suggests that Hydro will consult with Newfoundland Power on the design and results of the coming analyses related to conservation and demand management, but it is not clear that Newfoundland Power will share "ownership" of the process.

Personnel from Newfoundland Power consider Hydro to have been open in discussing planned work, in sharing results, and in addressing use of analytical information in past program design and evaluation. It remains clear, however, that Hydro's system planners retain responsibility for program design, the range of assumptions analyzed, the nature of the analyses, selection of resources to assist in performing analyses, oversight of study and analytical work, and final reports.

...

One can conclude that it is not necessarily certain that Hydro and Newfoundland Power (and perhaps other stakeholders as well) will agree on the range of schedule and cost assumptions that should be employed. Scope and methodological viewpoints may differ as well. The same is true of views about the time required to complete work that must serve as the foundation for assessing conservation and demand management potential. Full visibility into study work and management of those performing it and vetting results also has importance in our view. Therefore, while Liberty commends efforts to engage Newfoundland Power in discussions and while Liberty would expect Hydro to consider to listen carefully and respond to input, a better approach would be to approach the work not from the perspective of "ownership" by

Hydro, but of “partnership” between the two and transparency of the work and its results to the Board and to all stakeholders. (underlining added)

Preamble: It appears that Liberty is recommending a joint decision-making process (a “partnership” approach) between Hydro and NP, as contrasted with a unilateral decision-making process implied by the “ownership” approach.

Is Hydro in agreement with the partnership approach described in the Preamble?

Is Hydro concerned that the partnership approach might result in a slower timeline to implementation than an ownership approach? If so, how does Hydro suggest that its relationship with NP with regard to CDM program design be characterized and managed.

GRK-NLH-83

Re: Recommendation 2.16 (Liberty Report, p. 36)

Citation:

2.16 Complete planned demand management analysis on a Hydro/Newfoundland Power jointly scoped, conducted, and developed basis and report to the Board a structured cost/benefit analysis of short term program alternatives by September 15, 2015. (Conclusion No. 2.21)

The most essential elements of this recommendation are:

- Ensuring, in the event that Hydro and Newfoundland Power do not agree on a range of new capacity timing and cost assumptions to consider, that the work planned incorporates a range of assumptions that is sufficiently broad to encompass those of both entities.
- Ensuring methods and perspectives broad enough to provide for a full identification and analysis of the short-term costs and benefits (both economic and with respect to improving reserves) of options for the period leading up to the introduction of Muskrat Falls

Is Hydro confident that it and NP will be able to develop a suitable framework, jointly scope, conduct and develop a demand reduction plan, and report it to the Board by September 15, 2015? If not, how does Hydro propose that these issues be managed in order to lead to the approval and implementation of new CDM programs as promptly as possible?

GRK-NLH-84

Re: Recommendation 2.16 (Liberty Report, p. 36)

Citation:

- Shortening what we understand to be Hydro’s estimation of the time for completing required foundational work and generating a list and a structured evaluation of potential demand side options for the short term.

What exactly does this “foundational work” consist of, and what is Hydro’s estimate of the time required for it?

GRK-NLH-85

Re: Recommendation 2.16 (Liberty Report, p. 36)

Citation:

- Shortening what we understand to be Hydro’s estimation of the time for completing required foundational work and generating a list and a structured evaluation of potential demand side options for the short term.
- Making the study and analytical process and its resulting options and the analysis of them transparent and available to the Board and stakeholders as soon as possible, in order to expedite the process of instituting any short term demand side options that may prove beneficial.

What is Hydro’s estimation of the time required to generate “a list and a structured evaluation of potential demand side options for the short term”? If appropriate, please provide references to other documents where these questions have been addressed.

GRK-NLH-86

Re: Recommendation 2.16 (Liberty Report, p. 36)

Citation:

- With respect to longer term options, ensuring that work now proceeds with as clear an understanding as possible of the costs avoided by and the benefits made available to customers who bear responsibility for new capacity costs and the costs of conservation and demand management costs, in order to provide a sound foundation for determining what measures and programs should be instituted.

What are the steps to be taken by Hydro, by NP and by the Board in order to ensure that these resources are made available as promptly as possible?

GRK-NLH-87

Re: Muskrat Falls Project Oversight Committee, Committee Report, period ending Sept. 2014, p. 20

Citation:

Nalcor advises that its design for the North Spur has been informed by numerous engineering studies, resulting in the incorporation of specific features to ensure long-term stability. The design has been validated by the Project’s Independent Engineer, and by Hatch Ltd., an international project and construction management firm operating in the mining, metallurgical, energy and infrastructure sectors. In addition, Nalcor advises that Professor Izzat Idriss, a seismic hazard expert from the University of California and Dr. Serge Leroueil, an expert in sensitive soils from Laval University, have both reviewed the geotechnical assessments and studies for the North Spur. The full details of the Committee’s questions and Nalcor’s responses regarding the North Spur are included in Appendix D. (underlining added)

Please provide:

- a list of the engineering studies referred to, indicating the title, author and date of each;
- a list of the specific features to ensure long-term stability that have been incorporated, with a detailed description of each;
- the title, author and date of the report of the Project's Independent Engineer that "validates" the design; and
- the title, author and date of the report by Hatch that "validates" the design.

GRK-NLH-88

Re: Muskrat Falls Project Oversight Committee, Committee Report, period ending Sept. 2014; Appendix D, p. 34

Citation:

The solution for the North Spur has been addressed in numerous engineering studies and investigations by competent and qualified geotechnical engineers. The geotechnical conditions at the North Spur are well understood by Nalcor and its engineering consultants.

Please provide a list of the numerous engineering studies and investigations referred to, indicating the title, author and date of each, and identify the engineering consultants referred to.

GRK-NLH-89

Re: Muskrat Falls Project Oversight Committee, Committee Report, period ending Sept. 2014, Appendix D, p. 35

Citation from the Independent Engineer (IE):

"Concerns have been raised during earlier project reviews about potential liquefaction of the sensitive silt/clay strata during the design earthquake."

Please identify the earlier project reviews in which concerns were raised about potential liquefaction of the sensitive silt/clay strata during the design earthquake, and provide copies of the relevant passages if they are not publicly available.

GRK-NLH-90

Re: Muskrat Falls Project Oversight Committee, Committee Report, period ending Sept. 2014, Appendix D, p. 35

Citation:

"In the fall of 2013 the IE and other reviewers commented that the stability studies had not considered the special liquefaction and strength loss strength properties under earthquake loadings and that further studies were needed to deal with this issue."

Please provide copies of the communications referred to from the fall of 2013 in which the IE and other reviewers commented that the stability studies had not considered the special liquefaction and strength loss strength properties under earthquake loadings and that further studies were needed to deal with this issue.

GRK-NLH-91

Re: Muskrat Falls Project Oversight Committee, Committee Report, period ending Sept. 2014, Appendix D, p. 35

Citation:

New studies to address these issues were subsequently carried out during the first half of 2014. Nalcor and SNC presented the results of the studies in a meeting on July 20, 2014. This presentation was based on the following reports, which were submitted to the IE at that time.

- Report No. 1: "Earthquake Hazard Analysis - Muskrat Damsite, Lower Churchill, Labrador", issued by Gail M. Atkinson Ph. D., on May 22, 2014.
- Report No 2: "Three Dimensional (3D) Hydrogeological Study for the North Spur", Report no. H346252-0000-00-124-0001, Rev A, issued by Hatch on June 16, 2014.
- Report No. 3: "North Spur Stabilization Works – Dynamic Analysis Study – Phase 2", Nalcor Doc No. MFA-SN-CD-2800-GT-RP-0007-01, Rev A1, issued by SNC-Lavalin in May 2014.

Please provide copies of Report No. 1, Report No. 2 and Report No. 3, if they are not publicly available.

GRK-NLH-92

Re: Muskrat Falls Project Oversight Committee, Committee Report, period ending Sept. 2014, Appendix D, p. 35

Citation:

"Designs will be amended if any significant surprises or discrepancies are encountered."

Preamble: The IE appears to acknowledge the possibility that surprises or discrepancies could occur.

Does Hydro acknowledge the possibility that significant surprises or discrepancies could occur? Please provide Hydro's estimates of the likelihood that such significant surprises or discrepancies could occur, and of their severity.

DATED at Montreal, in the Province of Quebec, this 12th day of January, 2015.

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