O'DEA EARLE

September 4, 2013

Ms. G. Cheryl Blundon
Director of Corporate Services and Board Secretary
Board of Commissioners of Public Utilities
120 Torbay Road
P.O. Box 21040
St. John's, NL A1A 5B2

Dear Ms. Blundon:

Re: Newfoundland and Labrador Hydro 2014 Capital Budget Application

In relation to the above, please find enclosed please find one (1) original and eight (8) copies of the Consumer Advocate's Requests for Information numbered CA-NLH-01 to CA-NLH-40.

A copy of this correspondence, together with enclosures, has been forwarded directly to the parties listed below.

We trust the foregoing is found to be in order.

Yours very truly,

O'DEA, EARLE

THOMAS JOHNSON
TJ/cel
encl.

cc: Newfoundland and Labrador Hydro
Mr. Geoffrey Young

Newfoundland Power Inc.
Mr. Gerard Hayes

Steward McKelvey
Paul Coxworthy

Poole Althouse
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IN THE MATTER OF the *Public Utilities Act,* (the "Act"); and

IN THE MATTER OF an Application by Newfoundland and Labrador Hydro for an Order approving: (1) its 2014 Capital Budget pursuant to Section 41(1) of the Act; (2) its 2014 capital purchases, and construction projects in excess of $50,000 pursuant to Section 41(3)(a) of the Act; (3) its leases in excess of $5,000 pursuant to Section 41(3)(b) of the Act; and (4) its estimated contributions in aid of construction for 2014 pursuant to section 41(5) of the Act and for an Order pursuant to Section 78 of the Act fixing and determining its average rate base for 2012.

Requests for Information by the Consumer Advocate

CA-NLH-01 to CA-NLH-40

September 4, 2013

CA-NLH-01 Upgrade Excitation Systems Units 1 and 2 (C-22; Tab 9 of Volume 2)
On page 3 of the Report at Tab 9 it states that the ABB Unitrol P exciter was installed on Unit 1 in 2000 and on Unit 2 in 1999 and that these were installed as replacements for the originals installed in 1971. When these replacements were purchased what were their expected useful lives?

CA-NLH-02 Upgrade Excitation Systems Units 1 and 2 (C-22; Tab 9 of Volume 2)
Why would not replacing one of the existing exciters with the new Unitrol 6080 and using the removed controls as spare parts for the other unit and/or augmenting the spare parts inventory provide a viable alternative to the purchase of two new Unitrol 6080 control panels?

CA-NLH-03 Upgrade Excitation Systems Units 1 and 2 (C-22; Tab 9 of Volume 2)
How long will ABB Inc. continue to service the Unitrol P Excitators after the obsolete phase?

CA-NLH-04 Upgrade Excitation Systems Units 1 and 2 (C-22; Tab 9 of Volume 2)
Hydro outlines at p. 7 that there have not been any unit trips or outages due to Unitrol P Excitators on Units 1 and 2. It further outlines on p. 7 an alternative would be to purchase extra spare parts based on consumption to date. Given that there have been no outages, why is not seeking additional spare parts a viable alternative particularly given that spare parts can be purchased in 2013?

CA-NLH-05 Tab 9, Upgrade Excitation Systems, Units 1 and 2, Holyrood
Will the Excitation Systems for Unit 1 and 2 be required after 2017?

CA-NLH-06 Tab C, 2014 Capital Projects $500,000 and Over: Explanations – Replace Diesel Units, p. C-56
Please explain how Hydro arrived at its 100,000 operating hours for determining a replacement of a Diesel Genset. Does Hydro have data from other Canadian Utilities as regards the number of operating hours achieved from similar generating units before replacement is undertaken?

CA-NLH-07 Tab C, 2014 Capital Projects $500,000 and Over: Explanations – Install Fire Protection System, p. C-58
Has Hydro investigated the efficacy of the high pressure water mist system it seeks to install at the Nain diesel plant in terms of its capability to prevent damage to the diesel generator subsequent to the original cause of the fire, be it catastrophic engine failure (as in Nain in 1993) or other precipitating cause?

CA-NLH-08 Tab C, 2014 Capital Projects $500,000 and Over: Explanations – Install Fire Protection System, p. C-58
According to p. C-58 Hydro expects the Nain program to cost $107,100 in 2014 and $892,200 in 2015 for a total of $999,300. Hatch's report of March 29, 2012 put the total cost for Nain at $655,000 (Hatch Report at Vol. II, Tab 22, at p. A6). What is the reason for this increase?

CA-NLH-09 Tab C, 2014 Capital Projects $500,000 and Over: Explanations – Install Fire Protection System, p. C-58
For the Nain fire protection system project, will it be necessary to add an extension to the building to house the fire suppression equipment as potentially noted by Hatch in its report at

A-29 (Vol. II, Tab 22)?

CA-NLH-10 Tab C, 2014 Capital Projects $500,000 and Over: Explanations – Install Fire Protection System, p. C-58
At p. C-58, Hydro states that Nain will be the first of Hydro's diesel generating plants to be equipped with an automated fire protection system. Is it Hydro's intention to proceed to install automatic fire suppression systems in each of its 25 diesel powered generation plants? Please provide an estimate of the cost to equip the plants that Hydro has identified for installation of automatic fire suppression systems.

CA-NLH-11 Tab C, 2014 Capital Projects $500,000 and Over: Explanations – Upgrade Diesel Plant Projection Data Collection Equipment, p. C-60
How long has the current system been in place?

CA-NLH-12 Tab C, 2014 Capital Projects $500,000 and Over: Explanations – Upgrade Diesel Plant Projection Data Collection Equipment, p. C-60
This project is ranked 45 out of 46 in terms of priority (Vol. I, 2014 Capital Budget Overview, p. A-4). Please explain how this project came to be ranked so low in priority in Hydro's project ranking scheme.

CA-NLH-13 Tab C, 2014 Capital Projects $500,000 and Over: Explanations – Upgrade Diesel Plant Projection Data Collection Equipment, p. C-60
At p. C-60 it states that a total of 21 diesel plants are scheduled to be done. At p. C-61 it states that "the driver for this project is to provide load data for each of Hydro's diesel plants as input for planning future plant upgrades and engine sizing and to enable analysis to ensure that each plant is operating properly…". Please confirm that planning for future plant upgrades and engine sizing is not dependent upon this project's approval. If this cannot be confirmed, please explain why.

CA-NLH-14 Tab 23, Upgrade Diesel Plant Production Data Collection Equipment, Various Sites
At p. 6, Hydro outlines the manual retrieval of data is done at the end of the month. Has Hydro looked into the option of increasing the frequency of the manual documentation?

CA-NLH-15 Tab C, 2014 Capital Projects $500,000 and Over: Explanations – Install Automated Meter Reading, p. C-66
Please provide the number of meter readers employed by Hydro presently versus the number employed when AMR was first deployed by Hydro.

CA-NLH-16 Tab C, 2014 Capital Projects $500,000 and Over: Explanations – Replace Light-Duty Mobile Equipment, p. C-68
How many pole trailers does Hydro currently have for usage in remote communities?

CA-NLH-17 Tab C, 2014 Capital Projects $500,000 and Over: Explanations – Replace Light-Duty Mobile Equipment, p. C-68
This project includes the purchasing of eight additional pole trailers in 2014. Table 1 at p. 6 of Tab 27 in Vol. II, demonstrates that for 2009 to 2013 a total of 4 pole trailers have been purchased. Please explain why this request for an additional 8 pole trailers in 2014 is required.

CA-NLH-18 Tab C, 2014 Capital Projects $500,000 and Over: Explanations – Replace Light-Duty Mobile Equipment, p. C-68
Which remote communities are to receive the light pole trailers and what are these communities using presently for the transport of poles during pole replacement and installation work? Please explain why the status quo is not adequate.

CA-NLH-19 Tab D, 2014 Capital Projects $200,000 and over but less than $500,000: Explanations – Upgrade Generator Bearings Unit 2, p. D-34
At p. D-44, Voith Hydro outlines that inspection below the rotor on Unit 2 revealed that no action was taken to clean diamonds of the coils since the last inspection which was in October of 2011. What actions are supposed to be taken by Hydro to clean the diamonds of the coils between inspections and why was it not done?

CA-NLH-20 Tab D, 2014 Capital Projects $200,000 and over but less than $500,000: Explanations – Inspect Fuel Storage Tanks, p. D-114
At p. D-121, API Standard 653 states that routine in-service inspections of the exterior of a fuel storage tank should not exceed one month. Does Hydro plan to implement this one month in-service inspections on all fuel storage tanks?

CA-NLH-21 Tab D, 2014 Capital Projects $200,000 and over but less than $500,000: Explanations – Inspect Fuel Storage Tanks, p. D-114
At p. D-121, API outlines that all tanks shall be given a visual external inspection by an authorized inspector. How many employees at Hydro are authorized inspectors?

CA-NLH-22 Tab D, 2014 Capital Projects $200,000 and over but less than $500,000: Explanations – Inspect Fuel Storage Tanks, p. D-114
If there are no authorized inspectors, what is the training to become an authorized inspector?

CA-NLH-23 Tab D, 2014 Capital Projects $200,000 and over but less than $500,000: Explanations – Inspect Fuel Storage Tanks, p. D-114
The Table 1 Budget Estimate at p. D-115 indicated that in 2014, of the total $495,000 for the project, $303,600 represents contract work. Given the number of above ground fuel storage tanks and associated fuel supply systems with Hydro and the fact that a Fuel Storage Tank Inspection Plan has been developed, (Appendix "B"), has Hydro considered whether it can have its own personnel acquire the necessary accreditation and carry out the inspections and the costs of same compared to the use of external contractors?

CA-NLH-24 Tab E, 2014 Capital Projects $50,000 and over but less than $200,000: Explanations – Construct Storage Facility, p. E-139
Hydro outlines that the current structure has been in place for the last 38 years. Why can't this project be deferred?

CA-NLH-25 Tab E, 2014 Capital Projects $50,000 and over but less than $200,000: Explanations – Construct Storage Facility, p. E-139
This project ranks 43 out of 46 projects. Please explain how this project came to be ranked so low in priority in Hydro's project ranking scheme.

CA-NLH-26 Tab E, 2014 Capital Projects $50,000 and over but less than $200,000: Explanations – Construct Storage Facility, p. E-139
Does Hydro possess any reports from its staff in Postville that would indicate that the current configuration is hindering their ability to conduct day to day maintenance work at the facility or is creating any other difficulties?

CA-NLH-27 Tab I, 2014 Capital Budget: 2013 Capital Expenditures Overview
At page I-18, No. 7, Hydro outlines that the budget for the Upgrade Hydrogen Systems in Holyrood was $1,992.3 while the total was $3,487.8, for a variance of $1,495.5. Can Hydro explain the large variance between the budget estimate and the actual tender cost?

CA-NLH-28 Tab I, 2014 Capital Budget: 2013 Capital Expenditures Overview
From pages I-17 to I-23 a number of projects are shown to have significant variances over budget. Has Hydro taken any measures to ensure that its budgeting is more accurate in this Capital Budget Application than in the case of the projects referenced? If yes, please elaborate.

CA-NLH-29 Tab 5, Upgrade North Cut Off Dam Access Road, Bay D'Espoir
At Tab 5 of Vol. I, it states that "the recent washouts make the road impassable and necessitate repairs in order to permit access to the destination structure." When specifically has the road become impassable and necessitating repairs over the course of the 5 years shown in Table 2 at p. 7? For each event explain what was done and at what cost to make the road passable.

CA-NLH-30 Tab 5, Upgrade North Cut Off Dam Access Road, Bay D'Espoir
Which hydraulic structures are accessed via this road for the purpose of carrying out routine inspection and maintenance?

CA-NLH-31 Tab 5, Upgrade North Cut Off Dam Access Road, Bay D'Espoir
Is this road plowed of snow in the winter so as to allow vehicle traffic or is it accessed by snowmobiles when it is snow covered?

CA-NLH-32 Tab 5, Upgrade North Cut Off Dam Access Road, Bay D'Espoir
How long has this road been in its present condition or close to its present condition?

CA-NLH-33 Tab 5, Upgrade North Cut Off Dam Access Road, Bay D'Espoir
Does Hydro provide its personnel four wheel drive vehicles for the purpose of travelling the road for inspection and maintenance of its hydraulic structures?

CA-NLH-34 Tab 5, Upgrade North Cut Off Dam Access Road, Bay D'Espoir
What are the maintenance techniques used by Hydro for the road?

CA-NLH-35 Overhaul Steam Turbine Generator, Unit 2, Holyrood

Hydro outlines at p. 6 that Unit 2 has had approximately seven unit starts per year which is considered high and one of the governing factors in any major overhaul schedule. Hydro further outlines on p. 9 that it has mainly been due to system requirements that the unit has averaged approximately seven starts per year. Please provide the number of starts for the last five years for Unit 2, and explain why the system requirements mandate that the unit has to be restarted at such a frequency.

CA-NLH-36 Tab 10, Upgrade Plant Elevators, Holyrood

At p. 3, Hydro outlines three incidents that have occurred between 2006 and 2010. What steps have Hydro taken to rectify this situation, particularly after the May 2006 incident?

CA-NLH-37 Tab 10, Upgrade Plant Elevators, Holyrood

In Appendix C the safety observations reported from Safety Workplace Observation Program under Basic Factors outlines that inadequate maintenance and inadequate preventive assessments may have been a factor in the cause of this incident. What steps have Hydro taken to ensure that adequate maintenance was in place for these elevators?

CA-NLH-38 Tab 11, Upgrade Unit Vibration Monitoring System, Holyrood

At p. 13, Hydro outlines that alternatives exist, and a request was made to another turbine supervisory instrumentation system supplier for an alternative but the proposal received was incomplete and installation details were not provided at the time of this report. Is Hydro intending to pursue substantiation of this alternative? If not, why not?

CA-NLH-39 Tab 18, Wood Pole Line Management, Various Sites

Hydro outlines at p. 5 that it is seeking to have two full inspection cycles which will be required to provide adequate statistical evidence. This project has been ongoing for a significant period of time; how long does Hydro foresee it taking to have two complete inspection cycles?

CA-NLH-40 Tab 18, Wood Pole Line Management, Various Sites

Can Hydro indicate why it has been continuously over budget for this project given its ongoing history and continued expense?

Dated at St. John's in the Province of Newfoundland and Labrador, this 4th day of September, 2013.

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