O'DEA EARLE

October 7, 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 Submissions.

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
Mr. Liam O'Brien

Industrial Customers
Mr. Paul Coxworthy
Dean Porter

Vale Newfoundland and Labrador Limited
Ms. Leanne O'Leary, Cox & Palmer

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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.

To: The Board of Commissioners of Public Utilities (the "Board")

CONSUMER ADVOCATE'S SUBMISSIONS

October 7, 2013

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Introduction

Newfoundland and Labrador Hydro's ("Hydro") 2014 Capital Budget Application ("the Application") was filed with the Board of Commissioners of Public Utilities (the "Board") on August 5, 2013.

The following are the Consumer Advocate's submissions with respect to the Application:

The Public Utilities Act, RSNL, c. P-47.

As set out by s. 37(1) of the Public Utilities Act RSNL1990 c. P-47 as amended, a public utility such as Hydro, shall provide service and facilities that are reasonably safe and adequate and just and reasonable.

Section 41 of the Public Utilities Act requires a public utility to submit an annual capital budget of proposed improvements or additions to its property for approval by the Board, while section 78 of the said Act vests authority in the Board to fix and determine the rate base for the service provided or supplied to the public by the utility and also gives the Board the power to revise the rate base.

The Electrical Power Control Act, 1994

Section 3(b) of the Electrical Power Control Act, 1994 SNL1994 c. E-5.1 as amended, outlines that all sources and facilities for the production, transmission, and distribution of power in the province should be managed and operated in a manner that would result in:

(i) the most efficient production, transmission, and distribution of power;

(ii) consumers in the province having equitable access to an adequate supply of power, and;

(iii) power being delivered to customers in the province at the lowest possible cost consistent with reliable service.

The onus rests upon a utility to establish before the Board that the expenditures proposed are necessary in the year in which they are proposed. Further, the onus is on a utility to show that the proposed expenditures represent the lowest cost alternative for the provision of electricity service in the province.

The Board must determine whether Hydro's proposed capital spending projects in 2014 are reasonably required for Hydro to meet its statutory obligations to provide reasonably safe and adequate least cost service to its customers.

In light of these observations, the Consumer Advocate wishes to make submissions upon the following projects:

A: Upgrade Excitation Systems Unit 1 and 2(C-22; Tab 9 Volume II);

B: Upgrade Diesel Plant Projection Data Collection Equipment (C-60; Tab 23 Volume II);

C: Inspect Fuel Storage Tanks (D-114);

D: Upgrade North Cut-Off Dam Access Road Bay d'Espoir (Tab 5);

E: Replace Vehicles and Aerial Devices (C-78; Tab 29, Volume II);

F: Install Hand Held Pendant to Overhead Crane (D-98);

G: Remove Safety Hazards (D-204);

H: Upgrade Shoreline Protection (C-11; Tab 4, Volume I).

A: Upgrade Excitation Systems Unit 1 and 2(C-22; Tab 9 Volume II)

Hydro is seeking to upgrade the control components of the existing ABB Inc. Unitrol P Exciters on Units 1 and 2 at Holyrood. The cost of this project is $1,110,900.00 over 2014 and 2015.

Hydro states that the expected useful life of the control section of the ABB Unitrol P exciter is 15 years, while the power sections would be 25 years. The equipment for Unit 1 was purchased in 2000 and Unit 2 in 1999 (Reply to CA-NLH-1). At this stage, the control sections are just nearing the end of the estimated useful lives, but have not had issues to date such that the reliability of the control systems is the basis for the proposal (Tab 9, Volume II, pg. 5). This project is ranked 23 out of 46 by Hydro in its ranking of projects.

ABB Inc., has outlined that it would "...try to support the Unitrol P as long as we have service engineers available" (Reply to CA-NLH-3). Hydro has spare parts on hand, and the record demonstrates that the ability for Hydro to increase its inventory exists. The cost to purchase an extra set of required items would be $97,028.00 (Reply to V-NLH-21) as opposed to the $654,300.00 for this project.

The Consumer Advocate submits that there is a viable option in the purchase of additional spare parts at this time. Even obtaining 2 or more of each part required for this system is more cost efficient than proceeding with this project, particularly given that though there have been 15 electric cards and couplers that have failed since 2008, there have not been any unit trips or outages due to the Unitrol P. Exciters. This is particularly so given that the control systems "...have worked well since their installation" (Tab 9, Volume II, pg. 5).

Further, according to the Application, Hydro still has time to gather and stock additional spare parts for the current control system. Suitable substitutes can be provided where originals are no longer available, and it is only in 2015 that ABB will not support additional parts (Tab 9, Volume II, pg. 7). Thus, there is sufficient time to obtain a sufficient inventory of spare parts now at a fraction of the overall cost of this project.

As such, it is submitted that this project should be rejected and instead, Hydro increase its inventory of spare parts for this system. Most concerns about the availability of spare parts can be alleviated by Hydro obtaining same through the end of 2013 and throughout 2014 to ensure a sufficient inventory is on hand.

B: Upgrade Diesel Plant Projection Data Collection Equipment (C-60; Tab 23 Volume II)

This project is ranked 45 out of 46 in terms of priority. The current telephone system has been in place since December 2005 (Reply to CA-NLH-11). While Hydro outlines that the telephone system is prone to interruption, this project is not being advanced in relation to outages.

This project, in of itself, is not directly economically justified (Reply to NP-NLH-20). In addition, daily load profiles are not required from the remote diesel plants to forecast load growth (IC-NLH-45). In addition, Hydro is only aware of 2 major utilities in Canada that collect demand information on such a detailed level as this project would permit (Reply to IC-NLH-44).

Hydro is seeking to install updated data collection equipment in 21 diesel plants, with 7 being equipped or updated in 2014, 2015 and 2016, at a total estimated cost of $819,400.00.

The Consumer Advocate submits that there is no need for this project at this time. The level of detail sought by Hydro as justification for this project will not assist in the forecasting of load growth in remote areas. The project could, according to Hydro, help predict certain information, but there is no demonstrated or industry-wide need for such information. In terms of planning for future plan upgrades and generator sizing for these remote diesel plants, Hydro does not require the daily load profiles and data sought in this project (Reply to CA-NLH-13). Hydro has not demonstrated that sub-hourly data is required, particularly given that this level of data does not appear to be standard industry practice.

The Consumer Advocate submits this project should be rejected.

C: Inspect Fuel Storage Tanks (D-114)

Hydro submits that $495,000.00 is required for this project in 2014. The majority of the amount sought is related to Contract Work at an estimated cost of $303,600.00. This project is ranked number 1 in terms of priority.

Hydro currently has 96 above ground fuel storage tanks. The inspection of tanks will always be an ongoing concern for Hydro to ensure that all tanks remain functional and up to required standards.

Hydro has adopted the tank inspection procedures of The American Petroleum Institute (API). These inspections include an external inspection of all tanks every 5 years, and an internal inspection every 10 years.

All inspections are to be carried out by an authorized inspector under the API guidelines. Hydro does not have any authorized inspectors at present (Reply to CA-NLH-21). The requirements to obtain Inspector Certification are set out in Reply to CA-NLH-22. There is an ongoing certification component to obtaining Inspector certification to ensure up to date compliance.

In response to CA-NLH-23, Hydro states that it has not considered using its own personnel to complete the work. The reason given by Hydro is that "...there are many aspects to this inspection." The mechanics of an external inspection, which must be carried out at a minimum every 5 years, do not appear to require the tank to be taken out of service (p. D-121-122) even when density testing is being completed as part of the testing.

The Consumer Advocate submits that with Hydro adopting the API standards, both internal as well as external inspections will need to be completed on a set schedule. The external inspections are to be completed every 5 years. Hydro previously had its own personnel perform routine inspections (D-115), however this was not completed in a uniform manner. The certification of employees as inspectors and the adoption of the API standards would alleviate any inconsistency in testing techniques and timing.

The Consumer Advocate submits that Hydro should consider and give a cost comparison of having its personnel trained to perform these inspections. At a minimum, it appears that external inspections could be completed by appropriately certified Hydro personnel. The requirements to become an authorized inspector are set out and could be undertaken by qualified employees, with renewals every 3 years and re-examination every 6 years.

At page D-129, Hydro lists its Fuel Storage Tank Inspection Plan. 28 tanks have a planned external inspection in 2015; 30 in 2016.

At this time, it is unknown what, if any, savings could be achieved by having Hydro personnel appropriately trained as authorized inspectors for inspections, even if for external inspections only. What is known is that tank inspections will be an ongoing concern for Hydro at a more regimented frequency on an ongoing basis.

The Consumer Advocate further submits that it is also not clear that external inspections should be capitalized, as maintained by Hydro. Hydro outlines that Level 2 inspections that are undertaken by certified specialists are usually capitalized. On the other hand, Level 1 inspections are usually expensed as operating costs, and involve visual external

inspections that supply sufficient detail to define further work (Reply to NP-NLH-14). The external inspections to be completed now that Hydro has adopted the API standards must be completed by authorized inspectors. However, the Consumer Advocate submits that this alone should not result in these inspections being capitalized. These inspections are becoming a routine component of Hydro's ongoing tank maintenance regime. The fact that certified specialists will be completing these external inspections does not necessarily dictate the associated costs should be capitalized.

The Consumer Advocate recognizes the need for ongoing inspections, however, requests that Hydro provide a cost analysis of having trained and authorized inspectors on staff versus the current arrangement of hiring contractors to perform inspections and any work required prior to this project being approved.

D: Upgrade North Cut-Off Dam Access Road Bay d'Espoir (Tab 5)

Hydro is seeking $631,700.00 for this project, which is ranked 36 out of 46 in terms of priority. This road is used to access 2 structures, namely LD-2 (North Cut-off Dam) and LD-6 (North Cut-off Saddle Dyke) as set out in CA-NLH-30.

Hydro's reply to CA-NLH-32 sets the background of this project: the road has been impassable for the transport of heavy equipment for the past 15 years, and has been close to its current condition for the last 3 years. It bears noting when considering this project that this road is not maintained in the winter, as no slow plowing occurs (Reply to CA-NLH-31). Given that the road is not plowed, it is not surprising that 2 of the 3 vehicle incidents listed by Hydro occurred during the winter, specifically in March 2008 and February 2013 (Reply to IC-NLH-5).

The Consumer Advocate submits that this project should not be approved at this time. The road has been near its present condition for the last 3 years, despite maintenance work being undertaken.

Heavy equipment transport via this access road has not occurred in the last 15 years. The road is not plowed in the winter, further limiting access in any event during winter. There are no plans indicated to start road plowing in the winter. If as Hydro states this road has been impassable for the transport of heavy equipment since 1998 and is not

plowed during winter in any event, then the need to spend money now to make it passable for heavy equipment is not pressing. To the extent that certain areas of the road have had wash out issues during spring run-off, issues which Hydro has attributed to collapsed culverts and inadequate draining ditches, the Consumer Advocate would recommend that Hydro focus on these immediate issues as opposed to a project with the scope and cost outlined in this Application.

E: Replace Vehicles and Aerial Devices (C-78; Tab 29, Volume II)

At its current budget estimate, Hydro is expecting $1,809,100.00 to be spent in 2014 and $1,091,000.00 to be spent in 2015 to replace 32 light duty vehicles and 7 heavy duty vehicles in accordance with Hydro's established criteria for vehicle age and kilometers (p. C-78).

Hydro outlines in reply IC-NLH-58 its recommended services lives for its cars/mini vans, pickup trucks and full size vans. In response to IC-NLH-59, Hydro outlines that it has only limited information on other Canadian utilities, however the replacement criteria for one other Atlantic utility cited by Hydro varies from the recommended service lives used by Hydro (IC-NLH-59). For comparison purposes, the one other Atlantic Utility lists the following criteria

Cars (Compact) Gas 5 Years or 200,000 km;
1/4 Ton (General) Pickups, vans, etc. Gas 5 Years or 200,000 km;
Meter Reader Vehicle Gas 3 Years or 150,000 km;
1/2 Ton Pickup (Meter Reader) Gas 4 Years or 200,000 km;
1/2 Ton, 3/4 Ton (General) Gas 6 Years or 200,000 km;
Diesel 6 Years or 200,000 km;
1 Ton Gas 6 Years or 250,000 km; Diesel 6 Years or 250,000 km
1 Ton Aerial device attached Gas 4 Years or 250,000 km; Diesel 5 Years or 300,000 km;
2 Ton to 4 Ton Chassis Class 6 (Evaluate unit condition after 6 Yrs.) Diesel 8 Years or 300,000 km;
5 Ton Chassis Class 7 (Evaluate unit condition after 8 Yrs.) Diesel 10 Years or 300,000 km;
10 Ton Chassis Class 8 (Evaluate unit condition after 8 years.) Diesel 10 Years or 300,000 km;

10 Ton Chassis with refurbishment of Boom/Hydraulic Device (Optional) Diesel 10 Years or 300,000 km.

Hydro's criteria to replace light duty vehicles every 5 to 7 years or 150,000 kilometers; Heavy Duty class 4, 5, and 6 are replaced every 6-8 years or 200,000 kilometers, while Class 7 and 8 are replaced every 6 to 8 years or 250,000 kilometers.

As can be seen, there is not consistency between Hydro's practice and the other Utility cited.

The Consumer Advocate submits that for next year's Capital Budget Application Hydro should be required to provide a survey of the replacement practices for vehicles and aerial devices by at least the other Atlantic Canadian utilities. This would allow for a fuller and more complete analysis and consideration of this ongoing project.

F: Install Hand Held Pendant to Overhead Crane (D-98)

The Consumer Advocate submits that this project is of low priority (ranked 46 of 46), and at this stage the information provided by Hydro is incomplete to allow for a full and complete analysis of the necessity of this project.

In response to NP-NLH-12, Hydro states that it has not recorded the number of hours that the cab of the overhead crane has been occupied. Hydro could only provide an estimate for same.

The overhead crane is still well within its service life. As outlined by Hydro in response to NP-NLH-13, the expected remaining service is 24 years.

The Consumer Advocate would suggest recording the numbers of hours over the next year and deferring the project until that time to allow Hydro to provide more complete information on this project.

Given the foregoing, the Consumer Advocate submits that this project should be deferred at this time.

G: Remove Safety Hazards (D-204)

The Consumer Advocate states that the information as provided by Hydro is incomplete for this project.

Hydro outlines at NP-NLH-17 that, *"...investigation is ongoing related to the defining appropriate solutions and no projects have been approved to date. No 2013 forecast is available at this time."*

Seeking an amount of $257,800.00 without a forecast or projects being approved to date provides no guidance to allow a meaningful review and analysis. Submitting these costs at this stage is premature.

In 2012, Hydro's total spending for this ongoing project was $141,400.00 of $249,100.00 that was approved. There is no justification for an increase in 2014.

The Consumer Advocate submits that this project should be deferred.

H: Upgrade Shoreline Protection (C-11; Tab 4, Volume I)

Hydro is seeking $763,400.00 over the next 2 years. This project is ranked number 1 in priority.

In 2014, $55,300.00 is being sought for planning and design, which, according to Table 4, Tab 4, Vol. 1, will take Hydro through to September 2014. This first aspect of this project "...involves an engineering investigation and design phase, will ensure that the least-cost alternative is selected to adequately address the shoreline protection issue on the Cat Arm Access Road" (Reply to IC-NLH-3).

At this stage, Hydro has not identified, let alone settled upon, the least cost alternative to address the shoreline protection issue. The Consumer Advocate submits that approving additional funds for labour, contract work and other costs in 2015 prior to a least-cost proposal being submitted is premature. The actual design, construction and closeout for this project may be more or less than currently sought. Upon completion of the engineering and design work, the parties will be able to evaluate the options presented by Hydro.

As such, the Consumer Advocate recommends that this project should be approved as to the 2014 estimated expenditures only. Upon completion of the scheduled field investigation and solution development, Hydro can apply for the construction aspect of this project with information necessary for a full evaluation.

RESPECTFULLY SUBMITTED AND DATED at St. John's, in the Province of Newfoundland and Labrador, this 7th day of October, 2013.

THE CONSUMER ADVOCATE
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