O'DEA EARLE

August 29, 2014

Board of Commissioners
of Public Utilities
P.O. Box 21040
120 Torbay Road
St. John's, NL AIA 5B2

Attention: G. Cheryl Blundon, Director of Corporate Services and Board Secretary

Ladies and Gentlemen:

Re: Newfoundland and Labrador Hydro's 2015 Capital Budget Application

Please find enclosed one (1) original and twelve (12) copies of the Consumer Advocate's Requests for Information numbered CA-NLH-01 to CA-NLH-83.

Hard copies of this correspondence and enclosures have been sent to the parties listed below both by mail and email.

Yours very truly,

O'DEA, EARLE

for THOMAS JOHNSON

TJ/cel
Encl.

cc: Newfoundland and Labrador Hydro
Attention: Geoffrey P. Young, Senior Legal Counsel

Newfoundland Power
Attention: Gerard Hayes, Senior Legal Counsel

Island Industrial Customers
Attention: Paul Coxworthy, Stewart McKelvey

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IN THE MATTER OF the Public Utilities Act, R.S.N.L. 1990, c. P-47 (the "Act"); and

IN THE MATTER OF an Application by Newfoundland and Labrador Hydro for an Order approving: (1) its 2015 capital budget, pursuant to s. 41(1) of the Act; (2) its 2015 capital purchases, and construction projects in excess of $50,000 pursuant to s. 41(3)(a) of the Act; (3) its leases in excess of $5,000 pursuant to s. 41(3)(b) of the Act; and (4) its estimated contributions in aid of construction for 2015 pursuant to s. 41(5) of the Act.

REQUEST FOR INFORMATION BY THE CONSUMER ADVOCATE
August 28, 2014

2015 Capital Projects Overview

CA-NLH-1 At Page 4 of the 2015 Capital Projects Overview, Hydro outlines that hydraulic plant expenditures represent 54.4 percent of the 2015 capital budget compared to an average of 36.2 percent over the last five years. Please explain the reason for the significant increase in hydraulic plant expenditures compared to the past five years.

Capital Plan

CA-NLH-2 At page 2, please provide the estimated cost of the 3rd transmission line from Churchill Falls to Wabush.

CA-NLH-3 At page A2, please provide a breakdown for the costs as shown for 2014 – 2016 for the Labrador West Transmission Line.

CA-NLH-4 What approval has been obtained for the $37 million expended in 2014?

CA-NLH-5 What is the current estimate as to when the new combustion turbine will be placed into service?

Holyrood Overview

CA-NLH-6 At page 4, Figure 2, what is Hydro's forecast for the cost of fuel to be consumed in Holyrood for 2014 to 2018 broken down by year?

CA-NLH-7 What projects in this Capital Budget Application have been precipitated by the events of late December, 2013 and January, 2014?

2015 Capital Projects 500,000 and Over

Replace Station Service Breakers, page C-13:

CA-NLH-8 What is the service history for the breakers and what was addressed with each service over the last five years?

Upgrade Generator Bearings Units 1 and 3, page C-19:

CA-NLH-9 Please provide a status update as to the repairs or upgrades to Units 4 and 2.

Automated Generator Deluge System, page C-21:

CA-NLH-10 What is the status of the work on Units 1 and 2 scheduled to be completed in 2014?

Purchase Spare Transformer, page C-25:

CA-NLH-11 Hydro outlines that its condition assessment tool provides a ranking for all transformer units. The results show that T1 displays signs of deterioration. When was the assessment of the T1 completed?

Replace Unit 2038, page C-53:

CA-NLH-12 What are the hours of the other three gensets in the Mary's Harbour Diesel Plant?

CA-NLH-13 What is Canadian utility practice with genset replacement in terms of hours and/or usage?

Upgrade Line Depots, page C-65:

CA-NLH-14 Hydro is estimating costs of $953,300.00 for 2015. What are Hydro's projections as regards to these ongoing upgrading line depot costs considering that it plans to refurbish these over the next nine years?

Projects over $200,000 but less than $500,000

Upgrade Quarry Brook Dam Equipment, page D-2:

CA-NLH-15 Has Hydro taken any steps to upgrade the signs and/or fencing installed on the dam in the early 1990's?

CA-NLH-16 Hydro outlines that there are no documented major upgrades to the drain or water supply line valves near the dam. Please provide the maintenance records for the Quarry Brook Dam equipment for the past 5 years.

CA-NLH-17 At Page D-4, Hydro outlines that due to the age of the valve at the Quarry Brook Dam, and previous experience, the valve has not been tested recently for fear that operation would result in valve failure. What previous experience is Hydro referring to, and when was the last time the valve was tested?

CA-NLH-18 How long has the drain valve been inoperable due to a damaged stem?

Replace Alternator Shaft, page D-8:

CA-NLH-19 Hydro outlines at Page D-13 that according to Brush, the potential service life for alternators and stub shafts is 40 years. Has Hydro determined why the current stub shaft original to the Unit has encountered the problems set out in this Application in only 22 years?

CA-NLH-20 Brush outlines at Page D-17 that there are two viable options. What is the cost for Option 1, repairing the current shaft and returning it to service without fully removing the hardness ring, but increasing inspections and examination?

Install Hydrometeorological Stations, page D-43:

CA-NLH-21 Please outline any communication interruptions since 2008 with the hydrometeorological gauges currently installed.

CA-NLH-22 Has Hydro investigated whether there are any steps or other measures that can be taken to reduce the incidents of missing or erroneous data points of communication interruptions with the current equipment?

Refurbish Generation Unit, Snook's Arm, page D-49:

CA-NLH-23 What is the economic justification for this project in light of the planned infeed?

Refurbished Intakes, page D-99:

CA-NLH-24 At Page D-110, Hatch outlines short term recommendations for Bay d'Espoir. Have these been completed?

CA-NLH-25 Did Hydro follow Hatch's recommendations as set out in Page D-127. If not, why not?

Upgrade Fire Protection (Main Warehouse), page D-165:

CA-NLH-26 Have there been any incidents with the current sprinkler system in the main warehouse prior to or after 2011when Hydro indicates false activations occurred from power losses?

Perform Site Work for Mobile Substation Barachoix, page D-222:

CA-NLH-27 Are there any Canadian utility standards that pertain to the appropriate land configurations and fencing for such mobile substations?

Increased Generation Capacity Makkovik, page D-295:

CA-NLH-28 When were the load forecasts for Makkovik completed?

Replace Peripheral Infrastructure, page D-346:

CA-NLH-29 Does Hydro have a program or strategy in place for obtaining spares of equipment in its inventory when the end of contract maintenance/warranties are approaching?

Projects over $50,000 but Less Than $200,000

Refurbish Unit Relay Protection - Paradise River, page E-34:

CA-NLH-30 Does Hydro have any spares for the Alstom relays in stock currently? Please list all spares held by Hydro for this system. If this project is approved, what will happen with these spares?

Purchase Meters, Equipment and Metering Tanks at Various Sites, page E-64:

CA-NLH-31 What are the recent experiences and inspections referred to by Hydro at page E-65 indicating that the metering tanks should start to be replaced?

Upgrade Transformer Differential Protection, Grandy Brook, page E-88:

CA-NLH-32 Please outline all incidents of a power failure on Grandy Brook L5 since 2008.

CA-NLH-33 At Appendix C, page E-95, the recommendation therein is dated August 13, 2008. Has there been any update or review since that time?

Replace WiFi Access Points, Various Sites, page E-120:

CA-NLH-34 Hydro outlines one failure with the existing access points, and there has been a degradation in the coverage in an area of Hydro Place. What is the extent of the degradation?

Tab 1 Upgrade Gas Turbine Plant Life Extension – Stephenville:

CA-NLH-35 As this is a multi-year project, and Hydro is seeking approval for the second and third years of the program, are all of the scheduled work items for 2014 as set out in page 4 and 5 of the Capital Budget Application on time and within budget?

CA-NLH-36 If Hydro anticipates any of the projects are not going to be completed in 2014, please outline why this is the case and when Hydro expects the project to be completed.

Tab 2 Replace Interior Coating on Surge Tank 3, Bay d'Espoir

CA-NLH-37 How long has Hydro been aware that the cathodic protection system has not been functioning property?

CA-NLH-38 How long are the repairs anticipated to extend the life of the surge tank?

CA-NLH-39 Please provide an update as to the status of the exterior work on surge tank 3 which was previously approved.

CA-NLH-40 Has Hydro investigated whether repair of the cathodic protection system located within the tank is an option to delay corrosion in the interior of the tank?

CA-NLH-41 In Appendix A, at page A8, Hatch outlines that the internal inspection revealed that the coating system on the interior of the tank roof, shell, bowl and riser is in good condition with some minor localized breakdown. As a result, Hatch recommended at Page A9 that a complete detailed assessment of the tank interior coating system with a certified NACE inspection occur within the next two years. Hydro's proposal for this project is that an inspection occur as part of the project. Following Hatch's recommendation, why shouldn't the inspection be completed first to determine whether the extent of work Hydro is anticipating is actually required. (See also pages A15, A16).

Tab 4 Rehabilitate Salmon River Spillway, Bay d'Espoir:

CA-NLH-42 Hydro outlines that the gates have only been used for spilling five times in the last 30 years. When was the last time one of the gates was required and used for spilling?

CA-NLH-43 How long have two of the six heaters been out of service?

CA-NLH-44 Please outline the instances in the past five years where the gate rollers were inoperable due to ice.

CA-NLH-45 Please explain why, when Hatch completed its electrical evaluation of the Salmon River Spillway, they found (at page A21) that the gate heating system for

Gate 2 did not turn on since the equipment had reportedly been removed from the gate, some of the gain heaters in all three gates were shorted or not connected to the power distribution panel, and the gain heater for Gate 3 was grounded? Is Hydro aware of how long this had been this case and is this still the condition for Gate 2?

CA-NLH-46 Why hasn't Hydro sought to implement the short term recommendations outlined by Hatch at page A-24 for the Salmon River Spillway?

Tab 5 Upgrade Powerhouse Roofing, Holyrood:

CA-NLH-47 Can this project be deferred given that AMEC's 2013 assessment recommended replacement "within the next five years" (page C-12)?

Tab 6 Replace Station Service Breakers - Cat Arm:

CA-NLH-48 Hydro outlines that the PLC system was installed in 1986 and is now obsolete. How long has the system been obsolete?

CA-NLH-49 Hydro advises that Schneider Electric has stated that there are no parts remaining for the breakers. What is the status of Hydro's inventory for spare parts?

Tab 8 Replace ABB Exciter Unit 2- Cat Arm:

CA-NLH-50 What is the inventory of parts on hand for the ABB Exciter?

CA-NLH-51 How long has it been in the obsolete phase?

CA-NLH-52 What was the anticipated useful life of the exciter on Unit 2 when it was put into service in 1985?

CA-NLH-53 Hydro outlines at page 7 that the complete exciter for Cat Arm has an anticipated useful of life of 32 years. Is this the case for the current exciter on Unit 2?

Tab 9 Upgrade Generator Bearings - Units 1 and 3, Bay d'Espoir:

CA-NLH-54 At page 6, Table 2, Hydro outlines the addition of oil to generator bearings due to leakage in litres. Does Hydro have any explanation as to why there was a substantial decrease in oil usage for between 2012 and 2013 for Unit 1, along with a substantial increase in oil usage between 2012 and 2013 for Units 3 and Unit 5?

CA-NLH-55 Please provide a status update to the work that is to be completed on Unit 4 in 2014.

Tab 14 Upgrade Power Transformers:

CA-NLH-56 At Page 5 Hydro outlines its criteria for the replacement of a transformer. Is Hydro aware of the replacement criteria utilized by other utilities across Canada? If so, please elaborate.

CA-NLH-57 Has Hydro determined the cause of the gasket material failing randomly throughout the transformer fleet?

CA-NLH-58 Has Hydro approached the manufacturer regarding this issue or contacted any other utilities regarding similar experiences?

CA-NLH-59 What is the status of the regulatory amendment and Hydro's lobbying through CEA?

Tab 15 Wood Pole Line Management, Various Sites:

CA-NLH-60 Please outline the status of the inspections for 2014 as set out in Table 5.

CA-NLH-61 Why was such a small sample size used for the three nondestructive testing methods?

CA-NLH-62 What is the cost of each of the Polux testing equipment, the Pole Scan testing equipment and the Pole Test equipment?

CA-NLH-63 Given that the Pole Test equipment was utilized by Hydro, would this option of

nondestructive testing be the least cost method in the long term?

Tab 17 Inspect Fuel Storage Tanks:

CA-NLH-64 Why are these inspections not considered part of Hydro's operating costs?

Tab 20 Replace Accommodations and Septic System, Ebbegunbaeg:

CA-NLH-65 Hydro outlines that the structure in Ebbengunbaeg was used until 2013. Please list the times and number of staff who stayed overnight at the site for the five years previous to 2013.

CA-NLH-66 Why are six bedrooms required? Has Hydro considered the standards of accommodations employed by Canadian industry for remote, temporary lodging in developing this project?

CA-NLH-67 On what basis does Hydro conclude that "adequate levels of comfort and privacy" require single room occupancy?

CA-NLH-68 On a typical rotation, how long do employees remain in Ebbengunbaeg?

Tab 23 Overhaul Diesel Engines, Various Sites:

CA-NLH-69 Please provide a status update as to the major work and/or upgrades outlined in Table 1 to be completed in 2014.

Tab 25 Construct Second Distribution Feeder, Nain:

CA-NLH-70 Hydro outlines that during extreme operating conditions, customer service entrance nominal voltage must range between 106 volts for single phase customers and 110 volts for three-phase customers to a maximum of 127 volts for a nominal 120-volt service. Please outline what does Hydro mean when it refers to "extreme operating conditions".

CA-NLH-71 Please outline the times over the past two years that there has been a voltage unbalance in the main system.

Tab 26 Install Automated Meter Reading, Various Sites:

CA-NLH-72 Please outline any issues or complaints from customers regarding the accuracy of the AMR readings in the last 3 years.

CA-NLH-73 Hydro states that this is a recurring project that commenced in 2007. For each year from 2007 to 2013, please outline the cost savings of this project as compared to the previous meter systems in place for all customer service areas listed on page 4 (Bay d'Espoir, Change Islands, Conne River, etc.).

CA-NLH-74 Why are "more flexible billing options" and "customer selected billing dates" not available under the current meter system?

CA-NLH-75 To date, has Hydro had to replace any defective endpoints in the meters using the Landis + Gyr systems? If so, when, how many, where were these meters located and how long were they in service?

CA-NLH-76 Hydro outlines at page 8 that for the deployment of the AMR in English Harbour West and Barachoix service areas, the savings are realized from no longer requiring a meter reader in these areas. What happened to these meter readers? Were they assigned to other areas for meter reading, retained by Hydro and assigned to other duties, etc?

CA-NLH-77 What is the basis for Hydro's statement that the ability to provide more detailed energy usage statistics to customers to track consumption patterns helps to promote energy efficiency?

Tab 28 Line Depot Condition Assessment and Refurbishment:

CA-NLH-78 Please provide the maintenance records for the Cow Head, Springdale and Rocky Harbour depots over the past 5 years.

Tab 29 Replace Vehicles and Aerial Devices:

CA-NLH-79 Why did Hydro limit its gathering of established replacement criteria for other utilities to only three Atlantic electric utilities?

CA-NLH-80 Did Hydro contact utility providers outside of Atlantic Canada to determine vehicle replacement criteria? If so, please elaborate. If not, why not?

CA-NLH-81 For heavy duty vehicles, all three of the utility vehicles outline more kilometers than Hydro. Does Hydro intend to increase its mileage to reflect other utilities?

CA-NLH-82 What is the justification for Hydro's replacement criteria as regards kilometers to be so significantly different from 2 of the 3 Atlantic utilities, in particular 1 and 2 in Table 1, page 2?

CA-NLH-83 Did the utility's survey by Hydro provide any policies to go with the base criteria for replacement to Hydro. If so, please provide results of same.

Dated at St. John's in the Province of Newfoundland and Labrador, this 28th day of August, 2014.

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