

1 **IN THE MATTER OF**

2 the *Electrical Power Control Act, 1994*,
3 SNL 1994, Chapter E-5.1 (the "*EPCA*")
4 and the *Public Utilities Act*, RSNL 1990,
5 Chapter P-47 (the "*Act*"), as amended, and
6 regulations thereunder; and
7

8 **IN THE MATTER OF**

9 an Application by Newfoundland and Labrador Hydro
10 for an Order approving:
11

- 12 1) its 2014 capital budget pursuant to s.41(1) of the *Act*;
- 13 2) its 2014 capital purchases and construction projects in
14 excess of \$50,000 pursuant to s.41(3)(a) of the *Act*;
- 15 3) its leases in excess of \$5,000 pursuant to s. 41(3)(b)
16 of the *Act*;
- 17 4) its estimated contributions in aid of construction for
18 2014 pursuant to s.41(5) of the *Act*; and
- 19 5) fixing and determining its average rate base for 2012
20 pursuant to s. 78 of the *Act*.

**PUBLIC UTILITIES BOARD
REQUESTS FOR INFORMATION**

PUB-NLH-1 to PUB-NLH-36

Issued: September 4, 2013

Volume I, Tab A. Total Capital Projects, page A-2

PUB-NLH-1 Please provide a breakdown of expenditures for each of Hydro's five cost of service systems relating to: i) load growth, ii) aging plant and iii) other. Please include a breakdown by hydro generation, thermal generation, diesel generation, transmission, and distribution.

Volume I, Tab Holyrood Overview, page 6: Hydro states that: *"During the standby phase, it is assumed that the plant will produce 20 GWh in each year to test the units to ensure that they are available if required."*

PUB-NLH-2: Has Hydro developed a plan with regard to how the Holyrood plant will be operated during the standby years? If so, please provide a copy, ensuring that it addresses the seasonal nature of the standby and whether it will be a cold or a hot standby.

PUB-NLH-3 Can the Holyrood Thermal Generating Station continue to operate for emergency use after 2021? If yes, please provide a copy of any plan that has been drafted for its continued use. If no, please explain why not.

PUB-NLH-4 If the Holyrood Thermal Generating Station is not able to operate for emergency use after 2021, what is Hydro's contingency plan for that period?

Volume I, Tab I, 2013 Capital Expenditures to June 30, page I-2

PUB-NLH-5 Please explain in detail the amount of (\$1,008,400) found for 2009 Projects in the table headed Actual Expenditure and Forecast, under the heading Forecast July-Dec 2013.

Volume I, Tab K, Rate Base

PUB-NLH-6 Please provide a listing of all capital expenditures, including those from the Allowance For Unforeseen Items, that are included in the Average Rate Base numbers for 2011 and for 2012 but that have not yet been specifically approved by the Board for inclusion in these rate base numbers, including the status of any information requested by the Board in order to deal with these matters.

C-3; Volume I, Tab 1: Rewind Stator Unit 3 – Bay D'Espoir, page A70, clause 4.4: the AMEC report states that: *"During the rewind of the generator of either Unit #1 or Unit #3, there will be no redundancy for the station services for the Plant. It would be worthwhile to*

1 *consider an alternate power source to restore the redundancy in these power supplies during*
 2 *the outages.”*

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 4 **PUB-NLH-7** How did Hydro address this same recommendation during the rewind of Unit
 5 #1, found at C-3 in the 2013 Capital Budget application?

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 7 **PUB-NLH-8** How will Hydro address this recommendation in 2014 during the rewind of
 8 the Unit #3 stator?

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 10 **PUB-NLH-9** Upon completion of the rewind of Unit #3 will there be a spare winding on
 11 site?

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 14 **C-5; Volume I, Tab 2: Surge Tank 3 Refurbishment – Bay D’Espoir, page A22: the Hatch**
 15 **report states that: “It is therefore recommended that during the execution of future interior**
 16 **work, additional UT readings be taken around the entire circumference of the bottom two**
 17 **courses to determine the actual shell plate thickness.”**

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 19 **PUB-NLH-10** How will Hydro address the recommendation that additional UT readings be
 20 taken of the entire circumference of the bottom two courses during the
 21 execution of future interior work?

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 24 **C-5; Volume I, Tab 2: Surge Tank 3 Refurbishment – Bay D’Espoir, page A40: the Hatch**
 25 **report states that: “It is our opinion the CP system is not functional and poses a hazard to**
 26 **the turbine runner and other components.” It is then recommended to: “Remove the**
 27 **existing CP system and all associated components and supporting system.”**

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 29 **PUB-NLH-11** How will Hydro address the recommendation that the existing CP system and
 30 all associated components and supporting system be removed?

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 32
 33 **C-8; Volume I, Tab 3: Upgrade Burnt Dam Spillway Structure – Bay D’Espoir, page 4:**
 34 **Hydro states that: “Most of work to be completed during this project will address deficiencies**
 35 **with the power supply systems that were outside the scope of Hatch’s mandate but are**
 36 **necessary to achieve the overall reliable operation of Burnt Spillway as assessed by Hatch.”**

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 38 **PUB-NLH-12** Please provide a breakdown of the work, identifying the cost of purchases and
 39 labour, that will be undertaken by Hatch, by other contractors, and by Hydro
 40 employees.

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 42 **PUB-NLH-13** Please provide all reports, either internal or external, addressing the current
 43 condition of plant and justifying each aspect of the project.

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 45
 46 **C-11; Volume I, Tab 4: Upgrade Shoreline Protection – Cat Arm:**

PUB-NLH-14 Is the 80 m section of road embankment near the Cat Arm powerhouse at Devil's Cove, included in this application, also included in the application for Crown Easement reported by Hydro in the Application for Approval of Supplemental Capital Projects filed with the Board on July 23, 2012?

C-26; Volume II, Tab 11: Upgrade Vibration Monitoring System – Holyrood, pages 11-12:

PUB-NLH-15 Since Units #1 and #2 will be required until 2021, has Hydro requested GE to provide a quote to provide continued support to the vibration monitoring system for these units on a contractual basis after March 31, 2014? If no, why not? If yes, what has been the result of this request?

PUB-NLH-16 Is leaving the existing systems on Units 1 and 2 and upgrading only Unit 3 an alternative? If yes, why has it not been included in the analysis? If no, why not?

C- 35; Volume II, Tab 15: Upgrade Circuit Breakers – Various Sites, page 13: When discussing the continued use of bushings and instrument transformers with PCB concentrations of 500 mg/kg and greater until December 2025, Hydro states that: *"If this regulatory amendment is not granted, the capital investment required for oil circuit breaker replacements will increase significantly in 2014."*

PUB-NLH-17 What does Hydro forecast to be the dollar impact on the 2014 Capital Budget if the amendment to allow the continued use of bushings and instrument transformers with PCB concentrations of 500 mg/kg past December 31, 2014 is not granted?

PUB-NLH-18 If the amendment to allow the continued use of bushings and instrument transformers containing PCB concentrations of 500 mg/kg past December 31, 2014 is not granted, please detail the impact on Hydro's resources as a result of this legislated requirement.

C-44; Volume II, Tab 19: Refurbish Anchors and Footings TL202 and TL206 – Bay D'Espoir to Sunnyside, page 6: According to Hydro: *"Currently, there are no viable methods for testing the strength of the buried anchors. Excavation of the anchors is necessary to evaluate the full extent of the deterioration."*

PUB-NLH-19 Please describe the criteria, including any known or suspected correlation between the above and below ground conditions, used by Hydro to determine if an anchor should be uncovered.

C-56; Volume II, Tab 21: Replace Diesel Units – Port Hope Simpson and Mary's Harbour, page 11.

PUB-NLH-20 In a supplementary Capital Budget application filed by Hydro in July 2012, on page 3 of the attached report, Hydro stated that: *"Hydro anticipates the long-term supply study for Labrador South to be completed by December 2012. Once completed Hydro will submit a supplementary application to the 2013 Capital Budget to carry out the recommended long-term supply alternative."* On page 18 of the Addendum to the report Hydro continues: *"Hydro is continuing to make progress on the long term supply plan for the area, and will be filing the final report with the Board upon completion in the first quarter of 2013."* Please provide a copy of the completed report.

C-60; Volume II, Tab 23: Upgrade Diesel Plant Production Data Collection Equipment – Various Sites, page 4: Hydro states that: *"As well, the increasing presence of electric heat in Hydro's isolated systems is changing the historical typical load shape."*

PUB-NLH-21 Please provide details of any studies that have been undertaken by Hydro analyzing the impact of the use of electric heat in homes, in businesses and in public buildings on current and forecast load growth and shape in Hydro's rural areas.

PUB-NLH-22 Has Hydro undertaken any economic studies related to the overall cost or benefit to ratepayers, specifying those being provided a subsidy and those paying the subsidy, and/or to the system as a whole of the increased use of electric heat in rural systems? If yes, please provide copies. If no, please explain why not.

C-64; Volume II, Tab 25: Additions to Accommodate Load Growth – Hopedale, page 11: Hydro states that: *"The connected capacity of this facility will be approximately 435 kW, including a 135 kW provision for electric heat."*

PUB-NLH-23 Please provide details of the growth of electric heat in the Hopedale system over the period from 2005-2014F, including the rate classes where this growth has been observed, and show how the costs of this system over the same period are related to this change in heat source.

C-68; Volume I, Tab C: Replace Light-Duty Mobile Equipment – Various Sites: Hydro states that: *"The addition of eight pole trailers for remote communities is required for safety reasons."*

PUB-NLH-24 Please detail the safety concerns that make it necessary, at this time, to purchase eight additional pole trailers for remote communities for safety reasons.

D-68; Volume I, Tab D: Replace Automatic Greasing Systems Units 5 and 6 – Bay D’Espoir, page D-73: Hydro states that: *“There are times when an operator identifies deficiencies on these systems have the system fixed immediately, and without a work order. [Sic] Therefore the numbers below for the accumulative corrective history is [Sic] incomplete and does not show the total amount of attention the automatic greasing systems receive.”*

PUB-NLH-25 Please describe the lowest level of asset or expenditure where Hydro workers are required to track costs.

PUB-NLH-26 What steps are being taken by Hydro to ensure that work orders are being prepared for all material expenditures on capital assets?

E-5; Volume I, Tab E: Install Automated Fuel Monitoring System at West Salmon Spillway – Bay D’Espoir, page E-8:

PUB-NLH-27 In Order No. P.U. 4(2013) the Board ordered that the: *“Automated Fuel Monitoring System, Upper Salmon (\$192,700) is approved but costs for this project will not be recovered unless otherwise ordered by the Board.”* What is the status of the required verification that a variance from the legislative requirement for weekly tank dipping has been obtained by Hydro in order that the Board may deal with this matter?

E-66; Volume I, Tab E: Replace DC Distribution Panels and Breakers – Holyrood:

PUB-NLH-28 Since the replacement of the DC Distribution Panels and Breakers at Holyrood was not included in the Five-Year Plan included in the 2013 Capital Budget Application, please provide justification for the inclusion of this project in the 2014 Capital Budget.

PUB-NLH-29 Please provide details of the role that the failure of Unit 1 at the Holyrood Thermal Generation Station at Holyrood and the resulting January 2013 outage played in the determination that the DC distribution panels and breakers should be replaced at this time.

PUB-NLH-30 Has Hydro evaluated other options, such as the purchasing of spares? If yes, what other options have been considered, and why have they been rejected?

E-104; Volume I, Tab E: Replace Optimho Relays on TL203 – Western Avalon to Sunnyside; Various Sites, pages E-114 and E-115.

PUB-NLH-31 Please provide a brief description of the protection schemes for the bulk 230 kV transmission lines based on changes to the P1 and P2 protection systems.

E-139; Volume I, Tab E: Construct Storage Facility – Postville:

PUB-NLH-32 On page D-160 of Hydro's 2014 Capital Budget, Hydro has applied for the installation of additional washrooms at various sites. Is it Hydro's intention to address this issue at the diesel generating facility at Postville while there is other construction in progress? If not, why not?

Volume I, Tab H: Capital Expenditures 2009 – 2018: The actual Capital Expenditures for the past four years have ranged from \$54.15 million in 2009 to \$77.25 million in 2012. The forecast Capital Expenditures for the period from 2013 to 2018 are set out as follows:

<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
\$115,702	\$151,449	\$209,008	\$164,201	\$144,555	\$140,441

PUB-NLH-33 Using the rate of return on rate base and the operating expenses for the last test year (2007), and setting out any other reasonable assumptions, please calculate the impact on the revenue requirement for each of the upcoming five years that can be attributed directly to the forecast capital expenditures for that period.

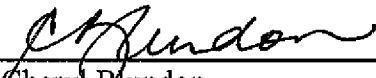
PUB-NLH-34 Using the rate of return on rate base and the operating expenses forecast for the next test year (2013), and setting out any reasonable assumptions, please calculate the impact on the revenue requirement for each of the upcoming five years that can be attributed directly to the forecast capital expenditures for that period.

PUB-NLH-35 Using the same base information provided in RFI PUB-NLH-33 and averaging the capital expenditures forecast for 2013 to 2018 to provide a constant Capital Budget for each of those years, please calculate the impact on the revenue requirement for each of those years that can be attributed directly to the forecast capital expenditures for that year.

PUB-NLH-36 Using the same base information provided in RFI PUB-NLH-34 and averaging the capital expenditures forecast for 2013 to 2018 to provide a constant Capital Budget for each of those years, please calculate the impact on the revenue requirement for each of those years that can be attributed directly to the forecast capital expenditures for that year.

DATED at St. John's, Newfoundland this 4th day of September, 2013.

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

Per 
Cheryl Blundon
Board Secretary