POOLE ALTHOUSE
BARRISTERS AND SOLICITORS

Jamie Merrigan, Q.C.
Dean A. Porter
J. Annette Bennett

Margaret C. Hepditch
Robby D. Ash
Glen G. Seaborn

Melissa May
Jonathan M. Andrews
Giselle Jones

Toll Free: 1 877 634-3136
E-Mail: info@poolealthouse.ca
www.poolealthouse.ca

Edward P. Poole, Q.C., Retired
D. Paul Althouse, Q.C., Retired

■ **CORNER BROOK**
Telephone: 709 634 -3136
Fax: 709 634 8247/9815
Western Trust Building
49-51 Park Street
Corner Brook, NL
Canada A2H 2X1

☐ Happy Valley-Goose Bay
Telephone: 709 896-8777
Fax: 709 896-8779
49A Grenfell Street
PO Box 1450, Station B
Happy Valley-Goose Bay, NL
Canada A0P 1E0

September 8, 2016

Via Electronic Mail & Courier
Newfoundland and Labrador Board
of Commissioners of Public Utilities
120 Torbay Road
P.O. Box 21040
St. John's, NL A1A 5B2

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

Dear Ms. Blundon:

Re: Newfoundland and Labrador Hydro 2017 Capital Budget Application
Requests for Information – IC-NLH-1 to IC-NLH-25

Please find enclosed one original and twelve (12) copies of the Requests for Information of the Island Industrial Customers Group in relation to the above noted Application.

We trust you find the foregoing satisfactory.

Yours very truly,

POOLE ALTHOUSE

Dean A. Porter

DAP/lp
Enclosures
J:\Clients\4648-24\NLBCPU, ltr 2.doc

cc: Ms. Tracey Pennell, Senior Legal Counsel - Newfoundland and Labrador Hydro
Mr. Thomas J. Johnson, Consumer Advocate
Mr. Gerard Hayes, Newfoundland Power
Mr. Paul Coxworthy, Stewart McKelvey
Mr. Thomas O'Reilly, Q.C., Cox & Palmer

IN THE MATTER OF the *Public Utilities Act*, RSNL 1990, Chapter P-47 (the Act) as amended; and

IN THE MATTER OF an Application by Newfoundland and Labrador Hydro, for an Order approving: (1) its 2017 capital budget, pursuant to s. 41(1) of the Act; (2) its 2017 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 2017 pursuant to s. 41(5) of the Act.

REQUESTS FOR INFORMATION OF THE ISLAND INDUSTRIAL CUSTOMERS GROUP

IC-NLH-1 – IC-NLH-25

ISSUED SEPTEMBER 8th, 2016

Capital Projects Overview

IC-NLH-1 At page 6 of the 2017 Capital Projects Overview, Hydro outlines that hydraulic plant represents 52.0% of the proposed 2017 Capital Budget for generation, as compared to the previous 5 year average of 39.4%. Does the information provided on page A3 of Appendix A (Rev. 1 Sept 7-16) of the 2017 Capital Plan remain Hydro's best information about the share of annual capital budgets for generation that will be represented by hydraulic plant in the upcoming 5 years (2017 – 2021)?

Specifically Assigned Capital Expenditures

IC-NLH-2 Identify any and all proposed capital expenditures for 2017 which Hydro intends to seek to have specifically assigned to one or both of members of the Island Industrial Customer Group (Corner Brook Pulp and Paper and NARL Refining LP).

Project C-8: Water System Replacements, Bay d'Espoir and Cat Arm

IC-NLH-3 With reference to page C-8, the project description states:

"This project involves the replacement of the water systems at two generating stations within the Bay d'Espoir Development:
1) Bay d'Espoir (BDE) – Replace Cooling Water System and Drainage Pump
2) Bay d'Espoir (BDE) – Replace Main Fire Heater; and
3) Cat Arm (CA) – Replace Domestic Water System

Please provide further details with respect to the cost of each project individually, with specific reference to the cost of the Cat Arm portion of the project.

IC-NLH-4 With reference to page C-9, Domestic Water System-CAT, has Hydro considered any alternatives to the replacement of the Domestic Water System for this facility?

Project C-15: Control Structure Refurbishment, Various Sites

IC-NLH-5 Please provide further details with respect to the cost of each project individually, including:

(a) Ebbengunberg Control Structure;
(b) North Salmon Spillway;
(c) Granite Canal Intake; and
(d) Burnt Dam Spillway Structure.

IC-NLH-6 With reference to page 15, Vol. II, Tab 3, Development of Alternatives, Replace Existing Piping with Corrosion Resistant Piping, please provide further details with respect to the potential frequency and cost of future maintenance costs of cleaning the piping every year because of fouling.

Project C-19: Gas Turbine Life Extension, Stephenville Gas Turbine

IC-NLH-7 Has Hydro considered alternatives to the work proposed, taking into consideration the use of the Stephenville Gas Turbine in the Post-Isolated System?

Project C-24: Upgrade Ventilation in Powerhouse #1 and #2, Bay d-Espoir

IC-NLH-8 Please provide further information with respect to any cost recovery by the reduced need for forced air heaters and power consumption.

Project C-26: Gas Turbine Life Extension, Hardwoods Gas Turbine

IC-NLH-9 Has Hydro considered alternatives to the work proposed, taking into consideration the use of the Hardwoods Gas Turbine in the Post-Isolated System?

Project C-31: Install Asset Health Monitoring System, Upper Salmon

IC-NLH-10 Please provide further information with respect to any cost recovery anticipated by the proactive monitoring assessment and maintenance planning created by this project. Is Hydro able to identify potential capital costs that would likely be incurred without the approval of this project?

Project C-49: Upgrade Distribution Systems, All Service Areas

IC-NLH-11 With reference to page C-50, Project Justification, states:

"The budget for the Central region is based on the level of activity expenditures experienced in 2015. The 2017 budget developed for the Northern region is based on the five-year average for distribution system upgrades for the period 2011-2015."

Why has Hydro used different rationales for the budgets for the Central and Northern regions?

Project C-53: Upgrade Corner Brook Frequency Converter, Corner Brook

IC-NLH-12 Hydro, at page C-53 (Volume I) of its Application states the following:

"Both the 50 and 60 Hz synchronous machines still have their original stator coils, but due to concerns with age and expected condition of the coils, the unit has been load restricted to 19 MVA. A 2015 condition assessment by Siemens recommended that the converter not be operated at its maximum output of 25 MW, but limited to 19 MVA, until both machines have been upgraded."

Is it Hydro's position that this entire proposed Project would need to be undertaken to achieve the 25 MW maximum output from the frequency converter or would the stator rewinding and cleaning alone achieve that result?

IC-NLH-13 With respect to R.F.I. IC-NLH-12 above, if it is Hydro's position that the entire proposed Project need not be undertaken at present to achieve the 25 MW maximum output result, which portions of the Project may be omitted/delayed while still achieving a 25 MW maximum output for the unit?

IC-NLH-14 Please provide details of a cost breakdown of each component of this Project, namely:

(a) the cost of the stator rewind;
(b) the cost of stator cleaning;
(c) the cost of rotor cleaning;
(d) the cost of exciter refurbishment;
(e) the cost of replacement of bellows between the air outlets; and
(f) the cost of installation of fans and air ducting to provide ventilation in the transformer vault,

including, with reference to Table 1: Budget Estimate, the portion of Material Supply, Labour, Consultant, Contract Work and other Direct Costs attributable to each component.

IC-NLH-15 At page C-54 (Volume I) of Hydro's Application, Hydro states:

"The Corner Brook Frequency Converter is an important component of the Island Interconnected System in that it enables 50 Hz power generation from Deer Lake to be accessible to the 60 Hz Island grid."

Please identify what benefits the frequency converter provides to the Island Interconnected System?

IC-NLH-16 At page C-54 (Volume I) of Hydro's Application, Hydro notes:

"During recent modifications to the transformer vault for fire protection, it was observed that the converter transformers were not cooling efficiently. During periods of warmer weather, transformer temperatures escalate to levels that are detrimental to transformer life."

It is noted from Table 1, Page 6, Tab 15 (Volume II) of Hydro's Application that a "building heating and ventilation upgrade" was completed in 2009. Please confirm whether the proposed "installation of fans and air ducting to provide ventilation in the transfer vault" proposed in the present Application differs from the upgrade completed in 2009 and, if so, how?

IC-NLH-17 With reference to Appendix A - 2015 Siemens Report, Vol. II, Tab 15, pages A7-A8. Siemens recommendations do not, at least on their face, encompass the rotor wedging, replacement of bellows and installation of

fans and air ducting components of this proposed Project. Are there any findings of the Siemens report which, in Hydro's view, support these components of the Project, and if not, what is Hydro's supporting expert assessment for these components of the Project?

IC-NLH-18 Will the separate capital project (<$50,000) referenced at page 4, Tab 15 (Volume I) of Hydro's Application to be completed in 2016 to install at the Corner Brook site the refurbished two exciters from the Grand Falls Frequency Converter comprise the total capital cost of the exciter refurbishment component of the overall project? If not, what additional works, and at what costs, are encompassed in the exciter refurbishment component of the project?

IC-NLH-19 Hydro states at page 10, Tab 15 (Volume II) there is "no viable alternative for this Project". Did Hydro consider, and presumably reject, any other alternatives? If so, please identify what other alternatives were considered by Hydro (and the reason for their rejection)?

IC-NLH-20 With respect to Vol. II, Tab 15, page 12, "Project Schedule", the construction on this Project is scheduled to commence June 2018, but the Tendering Award is scheduled to be made 8 months earlier, in September 2017. Is there any reason, if the Planning Start date for this project was pushed back from February 2017 to April 2017, the Design, Tendering Preparation, and Tendering Dates adjusted accordingly, and the Tendering Award date consequently changed to November 2017, why construction could still not commence, by 6 months later, in June 2018?

Project C-71: Replace 66 kV Station Service Feed, Holyrood

IC-NLH-21 Has Hydro considered the cost of the alternative option of replacing the exiting cable with a 66 kV overhead line as opposed to a 66 kV underground cable. If so, please provide further details with respect to the cost/benefit analysis performed.

Project C-75: Replace Substation, Holyrood

IC-NLH-22 Has Hydro considered any alternative options, including refurbishment of the Substation, considering the life and use of the substation in the Post-Isolated System.

Project C-80: Replace Power Transformers, Oxen Pond

IC-NLH-23 With reference to page C-80, Project Justification, Hydro states:
"There is an immediate need to replace Oxen Pond GT1 as it has failed and station service is currently being provided by a Newfoundland Power feeder with a temporary diesel generation as backup"

With reference to page A4, Hydro has assessed this project with a priority rank of 33. Please provide further explanation of why this project is assigned a low priority ranking if there is an "immediate need" as suggested for replacement?

Project C-89: Replace Vehicles and Aerial Devices, Various Sites

IC-NLH-24 Hydro has not assigned this project a priority ranking in Appendix A of the 2017 Capital Project Overview. Please provide further information with respect to the priority ranking assigned to this project by Hydro.

IC-NLH-25 How does Hydro justify the difference in replacement criteria between Hydro and other utilities as set out in Tables 1 and 2 at page C89?

DATED at Corner Brook, in the Province of Newfoundland and Labrador, this 8th day of September, 2016.

POOLE ALTHOUSE

Per: _____
Dean A. Porter

STEWART MCKELVEY

Per: _____
Paul L. Coxworthy

TO: The Board of Commissioners of Public Utilities
Suite E210, Prince Charles Building
120 Torbay Road
P.O. Box 21040
St. John's, NL A1A 5B2

Attention: Board Secretary

TO: Newfoundland & Labrador Hydro
P.O. Box 12400
500 Columbus Drive
St. John's, NL A1B 4K7

Attention: Ms. Tracey Pennell
Senior Legal Counsel

TO: Thomas Johnson, Consumer Advocate
O'Dea, Earle Law Offices
323 Duckworth Street
St. John's, NL A1C 5X4

TO: Newfoundland Power Inc.
P.O. Box 8910
55 Kenmount Road
St. John's, NL A1B 3P6

Attention: Gerard Hayes,
Senior Legal Counsel