WHENEVER. WHEREVER. We'll be there.



## HAND DELIVERED

September 12, 2018

Board of Commissioners of Public Utilities P.O. Box 21040 120 Torbay Road St. John's, NL A1A 5B2

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

Ladies and Gentlemen:

## Re: Newfoundland and Labrador Hydro – 2019 Capital Budget Application

Please find enclosed the original and 9 copies of Newfoundland Power's Requests for Information NP-NLH-001 to NP-NLH-013 in relation to the above noted Application.

For convenience, the Requests for Information are provided on three-hole punched paper.

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

If you have any questions regarding the enclosed, please contact the undersigned at your convenience.

Yours very truly,

Gerard M. Hayes Senior Counsel

Enclosures

c. Michael S. Ladha Newfoundland and Labrador Hydro

> Paul Coxworthy Stewart McKelvey

Dennis Browne, QC Browne Fitzgerald Morgan Avis

**IN THE MATTER OF** the *Electrical Power Control Act*, RSNL 1994, Chapter E-5.1 (the EPCA) and the *Public Utilities Act*, RSNL 1990, Chapter P-47 (the Act), and regulations thereunder;

AND IN THE MATTER OF an Application by Newfoundland and Labrador Hydro an Order approving: (1) its 2019 capital budget pursuant to s.41(1) of the Act; (2) its 2019 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 2019 pursuant to s.41(5) of the Act; and for an Order pursuant to s.78 of the Act fixing and determining its average rate base for 2013 and 2014.

> **Requests for Information by Newfoundland Power Inc.**

NP-NLH-001 to NP-NLH-013

**September 12, 2018** 

## **Requests for Information**

| Reference: | Volume I, 2019 Capital Projects Overview, page 4 line 25 to page 5 li  |  |
|------------|--|--|
|            | "The 2019 CBA contains 54 new projects, as shown in Volume I, Capital<br>Budget. These new projects include the refurbishment of generation facilities,<br>maintenance of gas turbine generation equipment, and modernization and<br>upgrade of terminal stations. The 2019 planned capital expenditure totals<br>\$118.2 million, which includes budgets for previously approved projects." |  |
| NP-NLH-001 | How does the \$118.2 million in 2019 capital expenditures relate to the \$264,496,000 total shown in Table 1: Projects by Definition and Table 2: Projects by Classification on page 15 of the report?   |  |
| Reference: | Volume I, 2019 - 2023 Capital Plan, page 5 lines 18 to 21.   |  |
|            | "Hydro has developed an updated maintenance plan for the penstocks on its<br>major generators, with scheduled PM9 (6-year frequency – comprehensive<br>internal inspection), PM6 (annual frequency – external inspection), and PM4<br>(monthly frequency – external inspection) inspections."  |  |
| NP-NLH-002 | Please provide a list of hydroelectric generating stations with major<br>generators, and a list of hydroelectric generating stations not considered to<br>have major generators.   |  |
| Reference: | Volume I, 2019 – 2023 Capital Plan, Appendix A   |  |
| NP-NLH-003 | Please provide a copy of the presentation 2018 Annual Planning Assessment<br>Meeting, April 13, 2018 presented by Hydro at the 2018 Annual Transmission<br>Planning Assessment Meeting hosted by the Newfoundland and Labrador<br>System Operator.   |  |
| NP-NLH-004 | How does Hydro's annual transmission planning assessment process input into its annual capital budget application process? For example, please identify and comment on any projects in the 2019 - 2023 Capital Plan that are discussed as cases in the presentation requested in Request for Information NP-NLH-003.   |  |
| Reference: | Volume I, 2019 – 2023 Capital Plan, Appendix D: Gas Turbine Planning<br>Report, page D4 lines 9 - 12.  |  |
|            | "Hydro has investigated options to address these obsolescence issues to allow<br>the continued operation of the facilities to their originally planned end of<br>service dates (HWD 2025 and SVL2028). These options included status quo<br>operation, repowering the facilities, conversion to synchronous condenser<br>facilities as well as early retirement."                            |  |
| NP-NLH-005 | Why was the alternative of replacing the existing 50 MW gas turbine generators with new units of similar capability not an option worthy of consideration?   |  |

| Reference: | Volume I, 2019 – 2023 Capital Plan, Appendix D: Gas Turbine Planning<br>Report, page D23 lines 1 - 8.   |  |
|------------|---|--|
|            | "From a transmission planning perspective, the replacement of existing gas<br>turbine generating capacity is not required at the Stephenville site to meet<br>transmission system planning requirements at this time provided that a<br>230/66 kV, 40/53.3/66.7 MVA power transformer with on load tap changer<br>(and associated 230 kV and 66 kV circuit breakers and disconnect switches)<br>are added at Bottom Brook Terminal Station. The addition of the 230/66 kV<br>transformer at Bottom Brook Terminal Station will provide back up or spare<br>transformer capacity for the loss of existing 230/66 kV transformer T1 at<br>Stephenville Terminal Station or loss of 230 kV transmission line TL209." |  |
| NP-NLH-006 | Is the addition of a 230/66 kV, 40/53.3/66.7 MVA power transformer and associated equipment to the Bottom Brook Terminal Station prior to 2021 included in Hydro's 2019 – 2023 capital plan? If not, why not?   |  |
| Reference: | Volume I, 2019 Capital Projects, \$500,000 and Over, Project Title:<br>Hydraulic Generation In-Service Failures, page C14.  |  |
| NP-NLH-007 | Provide historical expenditures for the period 2014 to 2018 for the historical projects now covered by this project.  |  |
| Reference: | Volume I, 2019 Capital Projects, \$500,000 and Over, Project Title:<br>Thermal Generation In-Service Failures, page C17.  |  |
| NP-NLH-008 | Provide historical expenditures for the period 2014 to 2018 for the historical projects now covered by this project.  |  |
| Reference: | Volume I, 2019 Capital Projects, \$500,000 and Over, Project Title:<br>Terminal Station In-Service Failures, page C42.  |  |
| NP-NLH-009 | Provide historical expenditures for the period 2014 to 2018 for the historical projects now covered by this project.  |  |
| Reference: | Volume I, 2019 Capital Projects, \$500,000 and Over, Project Title:<br>Terminal Station In-Service Failures, page C43.  |  |
| NP-NLH-010 | Are synchronous condensers considered by Hydro to be terminal station assets or thermal generation assets?  |  |

| Reference: | Volume I, 2019 Capital Projects Over \$50,000 but less than \$200,000,<br>Project Title: Replace Teleprotection, page E13, lines 10 - 13.  |  |
|------------|--|--|
|            | "With the completion of TL 267, Hydro now has an optical fiber link direct<br>from BDE to SSD. This fiber link can now be used to provide teleprotection<br>for TL 202 and TL 206 utilizing much less expensive Telecommunications<br>Multiplexers called IMUX instead of replacing the older PLC with newer<br>PLC equipment."                            |  |
| NP-NLH-011 | Does sharing the same fibre optic cable installed on the structures of TL267 to provide teleprotection for all three transmission lines TL202, TL206 and TL267 expose the 230kV transmission system to the Avalon Peninsula to any new risks? For example, could the failure of structures on TL267 compromise protection of the other transmission lines? |  |
| Reference: | Volume II, Tab 1, Hydraulic Generation Refurbishment and<br>Modernization, page 7, Tables 3 and 4.   |  |
| NP-NLH-012 | The scope of work for both Granite Canal and Bay d'Espoir Unit 1 are<br>similar. Why is the estimated labour cost for the Granite Canal project<br>significantly higher than the Bay d'Espoir Unit 1 project?  |  |
| Reference: | Volume II, Tab 1, Hydraulic Generation Asset Management Overview, page 16, lines 7 - 9.  |  |
|            | "A penstock is a large pipe, most commonly constructed of welded steel,<br>which conveys water from a reservoir to turbine. Hydro has eight steel and<br>one wood stave penstock serving the hydraulic units and three arrangements<br>with penstock/power tunnel combinations."   |  |
| NP-NLH-013 | Does Hydro have a specific asset management program for penstocks? If so, please describe the program.   |  |

**RESPECTFULLY SUBMITTED** at St. John's, Newfoundland and Labrador, this 12<sup>th</sup> day of September, 2018.

C

NEWFOUNDLAND POWER INC. P.O. Box 8910 55 Kenmount Road St. John's, Newfoundland A1B 3P6

| Telephone:  | (709) 737-5364 |
|-------------|----------------|
| Telecopier: | (709) 737-2974 |