newfoundland labrador hydro
a nalcor energy company

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August 19, 2020

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

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

Dear Ms. Blundon:

Re: Newfoundland Power's 2021 Capital Budget Application – Requests for Information

Please find enclosed one original and nine copies of Newfoundland and Labrador Hydro's Requests for Information NLH-NP-001 to NLH-NP-038 in relation to Newfoundland Power's 2021 Capital Budget Application.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

Michael S. Ladha
Legal Counsel & Assistant Corporate Secretary
MSL/sk

Encl.

cc: **Board of Commissioners of Public Utilities**
Jacqui Glynn
PUB Official Email

Newfoundland Power
Kelly C. Hopkins

Consumer Advocate
Dennis M. Browne, Q.C., Browne Fitzgerald Morgan & Avis

ecc: **Newfoundland Power**
Gerard M. Hayes
Regulatory Email

Consumer Advocate
Stephen F. Fitzgerald, Browne Fitzgerald Morgan & Avis
Sarah G. Fitzgerald, Browne Fitzgerald Morgan & Avis
Bernice Bailey, Browne Fitzgerald Morgan & Avis

IN THE MATTER OF the *Public Utilities Act,* (the "Act"); and

IN THE MATTER OF capital expenditures and rate base of Newfoundland Power Inc.; and

AND IN THE MATTER OF an application by Newfoundland Power Inc. for an order pursuant to Sections 41 and 78 of the *Act*:
(a) approving a 2021 Capital Budget of $111,298,000;
(b) approving certain capital expenditures related to multi-year projects commencing in 2021; and
(c) fixing and determining a 2019 rate base of $1,153,556,000.

NEWFOUNDLAND AND LABRADOR HYDRO

Requests for Information

NLH-NP-001 to NLH-NP-038

August 19, 2020

NLH-NP-001 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Schedule B, Customer Service System Replacement (Other, Multi-year)**

Was the recommendation from Ernst & Young LLP to implement a modern Customer Information System based on a determination that it was the least-cost solution for Newfoundland Power's customers? If so, please provide the detailed determination. If not, why not?

NLH-NP-002 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Customer Service Continuity Plan at p. 1**

Newfoundland Power has noted that their costs for providing customer service have decreased over time after adjusting for inflation. Is this because depreciation on the old system has ceased after its 20-year life and that is driving the cost decrease? If there are other reasons for this decrease, please provide details.

NLH-NP-003 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Customer Service Continuity Plan at p. 13.**

Newfoundland Power indicates 36% of current edge applications could be retired with the implementation of the new Customer Information System. Are the costs included in this budget to decommission these technologies? Are there any expected cost savings?

NLH-NP-004 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Customer Service Continuity Plan at p. 6/23–25.**

Newfoundland Power states "As product sales decline and vendor investment dwindles, it is increasingly likely that technology will no longer be upgraded or supported by its vendor." Who is the current vendor? Is the product currently supported?

NLH-NP-005 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Customer Service Continuity Plan, Attachment 1 "Ernst & Young LLP Customer Information System: Assessment Results and Planning Recommendations" at p. 4**

In the 2018 Risk Assessment, Ernst & Young LLP recommended ". . . that Newfoundland Power should formalize and deepen its examination of CSS modernization options to

include a thorough evaluation of the costs and benefits of replacement and deployment options." Was a cost-benefit analysis completed? If so, please provide. If not, why not? Have any tangible benefits been identified and if so, please provide details on these benefits?

NLH-NP-006 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Customer Service Continuity Plan, Attachment 1 "Ernst & Young LLP Customer Information System: Assessment Results and Planning Recommendations" at p. 17**

According to the Ernst & Young LLP Assessment Results and Planning Recommendations, data quality findings indicated Newfoundland Power scored above average when evaluated against utilities in comparable replacement scenarios. Did this analysis include the edge systems that could be replaced? If not, why not?

NLH-NP-007 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Schedule B, Customer Service System Replacement (Other, Multi-year)**

What level of data conversion and data tie out is involved with this project? How much time has been allotted for such activity within the plan identified?

NLH-NP-008 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Customer Service Continuity Plan, Attachment 1 "Ernst & Young LLP Customer Information System: Assessment Results and Planning Recommendations" at p. 21**

On what basis was the duration (i.e., four months) of the post go-live support determined? Is the duration adequate for the stabilization of a large scale system implementation? If so, please provide evidence to support this position.

NLH-NP-009 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Customer Service Continuity Plan, Attachment 1 "Ernst & Young LLP Customer Information System: Assessment Results and Planning Recommendations" at p. 23.**

On what basis was the duration (i.e., 21 months) of the implementation period determined? How detailed are the requirements at this stage? What percentage of contingency is included in this estimate?

NLH-NP-010 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Customer Service Continuity Plan, Attachment 1 "Ernst & Young LLP Customer Information System: Assessment Results and Planning Recommendations" at p. 23.**

Please provide details with respect to the calculation for procurement expenses and please provide Newfoundland Power's determination on how these costs qualify for capitalization.

NLH-NP-011 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Customer Service Continuity Plan, Attachment 1 "Ernst & Young LLP Customer Information System: Assessment Results and Planning Recommendations" at p. 23.**

Please provide details for the Facilities/Hardware expenses of $1.8 million.

NLH-NP-012 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Customer Service Continuity Plan, Attachment 1 "Ernst & Young LLP Customer Information System: Assessment Results and Planning Recommendations" at p. 24**

Recurring annual maintenance and support costs are estimated to be $1.3 million per year. Please provide the breakdown of these costs.

NLH-NP-013 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Schedule B, Customer Service System Replacement (Other, Multi-year)**

Has a change management plan been developed and implemented to support this project and have these costs been included in the estimate? If yes, please provide the details of the plan and the costs. If not, why not?

NLH-NP-014 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 1, Customer Service Continuity Plan at p.3**

Please provide details on capital and operating costs incurred related to the Customer Service system for the last five years.

NLH-NP-015 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020 Volume 1, Customer Service Continuity Plan, Attachment 1 "Ernst & Young LLP Customer Information System: Assessment Results and Planning Recommendations" at p. 23.**

Will a revised estimate be submitted to the Public Utilities Board for the Customer Service System replacement after the product and implementation partner has been selected? If not, why not?

NLH-NP-016 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 1, 2021 Capital Plan, sec. 4.3.9 at p.39.**

Has Newfoundland Power investigated the usage of other VHF systems currently in place within Newfoundland and Labrador?

NLH-NP-017 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 1, Schedule B, Table 1 at p. 88 of 98.**

The 2023–2025 Share Server Infrastructure expenditures reflect an average annual cost projection of $745,000. Please provide details to support this increase.

NLH-NP-018 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 2, St. John's North – Portugal Cove System Planning Study, app D at p. 1, fn. 44.**

Citation:

> 2 MVA load transfer from BCV-T1 to the new substation, 2.5 MVA from BCV-T1 to PUL, 7 MVA from RRDT2/T3 to the new substation, 1.5 MVA from PUL to the new substation, and 4 MVA load transfer from VIR-T3 to the new substation.

Can less load be transferred to the new substation, via AIR-03, from BCV-T1 and PUL to allow the deferral of the upgrade of 3.8 km of RRD-10 (to become AIR-03) or the need for a dedicated AIR-03 feeder?

NLH-NP-019 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 2, 2021 Additions Due to Load Growth at p.4.**

Citation:

> Alternative 3 consists of replacing the existing 8.3 MVA, 66/25 kV DUN-T1 transformer with a spare 25 MVA, 66/25 kV transformer and installing associated protection equipment.

If DUN-T1 is replaced with a transformer that is currently a spare transformer, is there an additional spare transformer available in case the replacement fails?

NLH-NP-020 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 2, Feeder Additions for Load Growth at p.2.**

Citation:

> There are several alternatives for addressing conductor overload conditions.

Does Newfoundland Power consider voltage conversions without load transfers as a means to address conductor overload? If not, why not?

NLH-NP-021 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 2, Feeder Additions for Load Growth at p.4.**

Citation:

> Compared to extending an adjacent distribution line, or constructing a new feeder, the least-cost alternative to address this overload condition is to: (i) upgrade and re-conductor 3.2 kilometres of 2-phase distribution line to 3-phase along Hodgewater Line; and (ii) re-conductor 0.8 kilometres of existing 3-phase distribution line along Hodgewater Line.

Was a detailed cost-benefit analysis completed to determine which of these alternatives were the least cost? If yes, please provide. If not, why not?

NLH-NP-022 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 2, Feeder Additions for Load Growth at p.5.**

Citation:

> Compared to extending an adjacent distribution line or constructing a new feeder, the least-cost alternative to address this overload condition

> is to: (i) construct approximately 700 metres of new 3-phase 4/0 AASC distribution line along Main Road; and (ii) upgrade 2.3 kilometres of existing single-phase distribution line to 3-phase along Main Road to the trestle across the Southwest River.

Was a detailed cost benefit analysis completed to determine which of these alternatives were the least cost? If yes, please provide. If not, why not?

NLH-NP-023 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 2, 2021 Additions Due to Load Growth at p.4.**

Citation:

> Alternative 3 consists of replacing the existing 8.3 MVA, 66/25 kV DUN-T1 transformer with a spare 25 MVA, 66/25 kV transformer and installing associated protection equipment. This would increase the total substation 25 kV transformer capacity from 8.3 MVA to 25 MVA. The existing DUN-T1 will become a system spare.

In addition to DUN-T1 becoming a system spare, does Newfoundland Power intend to replace the 25 MVA transformer that will be installed in the DUN substation with another spare transformer of similar size, either in this Capital Budget Application or in a future application? If so, has the cost of this spare been included in the cost-benefit analysis for this project? If not, why not?

NLH-NP-024 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 1, Schedule B, Transmission Line Rebuild (Clustered) at p. 21–23.**

Over the past ten years, how much of Newfoundland Power's transmission system has been rebuilt? Please provide response in both kilometres and percentage of total transmission.

NLH-NP-025 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 1, Schedule B, Transmission Line Rebuild (Clustered) at p. 21–23.**

Has Newfoundland Power taken down any of its old transmission infrastructure in the past ten years? If so, has it been mechanically tested? If so, did the results show any remaining capacity in the components? Please provide the results of any testing completed. If no testing was completed, why not?

NLH-NP-026 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 1, Schedule B, Rebuild Distribution Lines (Pooled) at p. 45–47.**

Over the past ten years, how much of Newfoundland Power's distribution system has been rebuilt? Please provide response in both kilometres and percentage of total distribution.

NLH-NP-027 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 1, Schedule B, Rebuild Distribution Lines (Pooled) at p. 45–47.**

Has Newfoundland Power taken down any of its old distribution infrastructure in the past ten years? If so, has it been mechanically tested? If so, did the results show any remaining capacity in the components? Please provide the results of any testing completed. If no testing was completed, why not?

NLH-NP-028 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 1, Schedule B, Rebuild Distribution Lines (Pooled) at p. 45–47.**

Please detail the reliability analysis, other than inspections, that Newfoundland Power undertakes to support the rebuild of its distribution lines.

NLH-NP-029 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, Volume 1, Schedule B, Rebuild Distribution Lines (Pooled) at p. 45–47.**

Citation:

> The Distribution project involves the replacement of deteriorated distribution structures and electrical equipment that have been previously identified through the ongoing preventative maintenance programs or engineering reviews.

Please describe in detail what is involved in the engineering reviews referenced.

NLH-NP-030 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, 2020 Capital Plan, sec 2.3.2, at p. 13/2–3.**

Citation:

> On a pro forma basis, the Company's 2021 revenue requirement is estimated to increase by approximately $3 million as a result of the capital projects proposed for 2021.

Please provide a detailed breakdown of this calculation in the following table format for both 2021 and 2022:

	2021	2022
Rate Base (A)		
Return % (B)		
Return (A*B = C)		
Depreciation (D)		
O&M (E)		
Income Tax (F)		
Revenue Requirement (C + D + E + F = G)		

NLH-NP-031 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, 2020 Capital Plan, sec. 2.3.2, at p. 14/3–5.**

Citation:

> Since 2014, Newfoundland Power's contribution to revenue requirement has increased by approximately 6%. On an inflation-adjusted basis, the Company's contribution to revenue requirement has effectively remained flat.

Please provide the revenue requirement impact of the change in capital in Newfoundland Power's rate base (including depreciation, return, and interest) by year from 2014 to 2020.

NLH-NP-032 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, 2020 Capital Plan, sec. 2.3.3, at p. 15/3–5.**

Citation:

> Newfoundland Power's contribution to average customer rates has increased by approximately 17% over the last 2 decades. On an inflation-adjusted basis, the Company's contribution to average customer rates decreased by 20%.

Please provide:

(a) Newfoundland Power's contribution to customer rates, nominal and inflation adjusted, as a result of changes to capital in rate base (including depreciation, interest, and return) for 2000, 2021, and 2022; and

(b) Please provide Newfoundland Power's contribution to customer rates, nominal and inflation adjusted, for 2000, 2021, and 2022 using a consistent Weighted Average Cost of Capital of 7.04% for each year.

NLH-NP-033 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, 2020 Capital Plan, sec. 2.3.3, at p. 14/1–2.**

Citation:

> Table 3 shows Newfoundland Power's actual and inflation-adjusted contribution to revenue requirement in 2014 and 2020.

Please restate Table 3 to compare 2010 to 2020.

NLH-NP-034 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, 2020 Capital Plan, sec. 2.3.3, at p. 15/1–2.**

Citation:

> Table 4 compares Newfoundland Power's total contribution to average customer rates in ¢/kWh in 2000 and 2020.

Please restate Table 4 to compare 2010 to 2020.

NLH-NP-035 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, 2020 Capital Plan, sec. 2.4.1, at pp. 16/14 to 17/3.**

Citation:

> Newfoundland Power's investment in T&D assets has increased at a rate 10% less than the average of other Atlantic Canadian utilities over the 10-year period ending 2018. The Company's capital investment in T&D assets has, in fact, increased at the lowest rate of any Atlantic Canadian utility. At the same time, Newfoundland Power experienced the highest rate of growth in customers served of these utilities.

Please provide the details of this calculation, including details of transmission versus distribution spending for Newfoundland Power versus the comparator group.

NLH-NP-036 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, 2020 Capital Plan, sec. 2.4.1, at pp. 16/14 to 17/3.**

Citation:

> Newfoundland Power's investment in T&D assets has increased at a rate 10% less than the average of other Atlantic Canadian utilities over the 10-year period ending 2018. The Company's capital investment in T&D assets has, in fact, increased at the lowest rate of any Atlantic Canadian utility. At the same time, Newfoundland Power experienced the highest rate of growth in customers served of these utilities.

Please provide this same comparison to Newfoundland Power using only distribution asset investment.

NLH-NP-037 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, 2020 Capital Plan, sec. 2.4.1, at pp. 16/14 to 17/3.**

Citation:

> Newfoundland Power's investment in T&D assets has increased at a rate 10% less than the average of other Atlantic Canadian utilities over the 10-year period ending 2018. The Company's capital investment in T&D assets has, in fact, increased at the lowest rate of any Atlantic Canadian utility. At the same time, Newfoundland Power experienced the highest rate of growth in customers served of these utilities.

Please explain how this metric is relevant to Newfoundland Power's capital investment alone, without normalizing for transmission investment made by Newfoundland and Labrador Hydro to serve Newfoundland Power's customers over this same time period.

NLH-NP-038 **Reference: "2021 Capital Budget Application," Newfoundland Power, July 9, 2020, 2020 Capital Plan, sec. 2.4.1, at pp. 16/14 to 17/3.**

Citation:

> Newfoundland Power's investment in T&D assets has increased at a rate 10% less than the average of other Atlantic Canadian utilities over the 10-year period ending 2018. The Company's capital investment in T&D assets has, in fact, increased at the lowest rate of any Atlantic Canadian utility. At the same time, Newfoundland Power experienced the highest rate of growth in customers served of these utilities.

Please provide this same metric on a dollar of capital investment per kilometer basis for both Newfoundland Power and the comparator group, for both transmission and distribution investment separately.

DATED at St. John's, in the Province of Newfoundland and Labrador this 19th day of August, 2020.

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