

November 02, 2021

Board of Commissioners of Public Utilities

P.O. Box 21040

120 Torbay Road

St. John's, NL

A1A 5B2

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

Dear Ms. Blundon:

Re: Newfoundland and Labrador Hydro - Application for Approval to Construct Phase 1 of Hydro's Long-Term Supply Plan for Southern Labrador

I would like to thank you and the board for your consideration and time in allowing me to address my concerns with the proposed “Newfoundland and Labrador Hydro - Application for Approval to Construct Phase 1 of Hydro's Long-Term Supply Plan for Southern Labrador”.

From my review of the various questions posed to NL Hydro and their responses to those questions, I am left in a state of shock and disbelief in what NL Hydro considers a “Long-Term

Supply Plan for Southern Labrador”. The Hydro Corporation Act, 2007 mandates Hydro to be responsible for:

- Developing and purchasing power and energy on an economic and efficient basis.
- Engaging within the province and elsewhere in the development, generation, production, transmission, distribution, delivery, supply, sale, purchase and use of power from water, steam, gas, coal, oil, wind, hydrogen and other products.
- Supplying power, at rates consistent with sound financial administration, for domestic, commercial, industrial or other uses in the province and subject to the prior approval of the Lieutenant-Governor in Council, outside of the province.

In their background information NL Hydro stated they have been studying long-term supply options since the early 2000’s. Here we are 20 years later, and NL hydro is only now presenting their most “Viable” option for what their idea of what the next 50 years of power supply will look like in southern Labrador. I would suggest that NL Hydro has failed the residents of Southern Labrador, its customers, its owners, and is in contempt of following their mandate set out in “The Hydro Corporation Act”.

I find NL Hydro’s responses to some of the posed questions seeking information on costs to be excessive of what is required and therefore self serving and see it a further attempt to justify their proposal, without having to give clear rational in their justification of eliminating alternative options that were “Supposedly” given consideration for Southern Labrador. As a case in point, I would like to at this time refer to the cost of Alternative 4: Interconnection to the Labrador Interconnected System.

This alternative consists of the interconnection of the southern Labrador communities to the Labrador Interconnected System near Happy Valley-Goose Bay. This would involve the construction of approximately 400 kilometres of 138 kV transmission line. This new 138 kV transmission line would tap off the existing 138 kV line between Muskrat Falls Terminal Station 3 and the Happy Valley Terminal Station. A new terminal station would be required in Port Hope Simpson to step the voltage down to 25 kV. Construction of the following 25 kV distribution lines would then be required to distribute the power to the four southern Labrador communities:

- 50 kilometres of 25 kV distribution line to connect Charlottetown;
- 3 kilometres of 25 kV distribution line to connect Port Hope Simpson;
- 50 kilometres of 25 kV distribution line to connect Mary's Harbour; and
- 30 kilometres of 25 kV distribution line to connect St. Lewis.

Preliminary cost estimates prepared by Hydro indicate that the total capital cost of such an interconnection would be in excess of \$400 million. Due to the magnitude of this cost, it was not considered further for analysis.

However, in the details provided in their response NP-NLH-004. NL Hydro refers to costs of this alternative to be obtained from the proposal by Hatch for their figures on costing. This raises some concern with me, as in the above proposed alternative there is no mention of any 69kV lines to be installed, whereas the Hatch numbers clearly state and figure in costs for such 69 kV lines that will run from Port Hope Simpson to Mary's Harbour and from Port Hope Simpson to Charlottetown. This seriously inflates the cost, as the cost of a 52 km 25 kV line from Port Hope Simpson to St. Lewis is stated to cost \$9,804,000.00, whereas a 49 km 69 kV line from Port Hope Simpson to Mary's Harbour has a cost of \$28,420,000.00. This inflates the total cost by 3 times the cost of this section of line alone. Not counting added inflation of stepping down from 138 kV to 69 kV and then down further to 25 kV.

This also raises a further concern for me to question as to Hydro's intent on proposing to build a 138 kV line to Port Hope Simpson, instead of a 69 kV line. From calculating the figures provided in the Hatch report, a 138 kV line costs \$680,000.00 per km, whereas a 69 kV line comes in at \$580, 000.00. It states 300 km in the Hatch report, but 400 in the above stated alternative. This is a \$100,000.00 in difference per km, which again inflates the total cost by \$40,000,000.00 for the required 400 km of transmission line.

Furthermore, there is an allowance for a 70 km 25 kV line from Charlottetown to Norman Bay for a cost of \$13,300,000.00. Again, there is no mention of Norman Bay being included in the communities considered for interconnection in the Alternative 4: Interconnection to the Labrador Interconnected System but is added into the total cost of the report by Hatch. Again, inflating the cost of Alternative 4: Interconnection to the Labrador Interconnected System.to suit NL Hydro's

narrative. I would further question why a 25 kV line would be required to be ran to Norman Bay, as it is again exceeding the requirements needed.

A further question on this would be if the numbers supplied by Hatch in installing the 138kV line included calculated costs of a larger proposal being considered by Hydro? Did it include a power supply for the communities of Cartwright, Paradise River, Norman Bay, and include extending the line to into the Labrador Straits to eliminate the costs associated with the O & M of the Diesel Plant in Lanse au Loup? If these factors were indeed included, it again inflates the costs to make Alternative 4: Interconnection to the Labrador Interconnected System, look uneconomical by removing those communities from this analysis and using those same cost estimates in considering and eliminating Alternative 4: Interconnection to the Labrador Interconnected System. If these communities were not included in the cost analysis, why weren't they considered as part of this long-term analysis plan by NL Hydro, and would the inclusion of these communities make the Alternative 4: Interconnection to the Labrador Interconnected System a more feasible, viable and logical option?

This leads me to the absence of another alternative that NL Hydro has neglected to assess or even address in their analysis for the long-term power supply for Southern Labrador. NL Hydro officials spoke to the fact on many occasions that it was possible to be able to transmit power back from the NL Island portion of the province via the 30 km Strait of Belle Isle Marine Cable Crossing after it had been stepped down and redistributed across the island. This alternative would reduce the required distribution lines by approximately 50%, Allow NL Hydro to have a stable efficient supply power coming back into the Labrador Straits, eliminating the need for their diesel generating station in Lanse au Loup, and ability to extent the line into southern Labrador and thereby eliminating the need for diesel generation in that area. However, this option was not contained in their analysis, nor is there any mention or consideration given to it as an alternative option as part of NL Hydro's long-term plan for Southern Labrador.

The thought that NL Hydro would suggest a 50 plus year power supply plan for Southern Labrador to meet its obligations to its customers and owners, by suppling "Dirty Hydrocarbon" energy going into the future, is inexcusable and lacks vision and foresight in its planning. Their plan makes no economical sense in today's "Green Economy" for our local businesses to benefit or to entice further growth in Southern Labrador. In a world where consumers expect, want, and

demand products produced from clean energy. NL Hydro is limiting our businesses and fish producers by placing them in a serious competitive disadvantaged position of facing a marketing backlash in today's marketplace, as their products will not be seen as "clean" or "green".

Nor does NL Hydro's plan address or help with growing energy demand to support increased potential economic activity and customer use in the area. NL Hydro is ignoring the social fact that many consumers want to switch to electric heat in their homes, but are limited due to NL Hydro's limited generating capacity at their generating stations and the high cost per kilowatt hour as a result of "Diesel" generation. These homeowners are forced to burn wood, which again contributes to carbon being introduced in the air, the removal of forests which reduces nature's ability to remove carbon from the air, and the introduction of smoke and other contaminants into homes affecting the air quality and health of its consumers.

I am not against interconnection of the communities via power distribution lines, but I am opposed to the construction of a "supper diesel" plant in Southern Labrador. I would urge the PUB to reject NL Hydro's request as their 50-year plan, which is already 20 years outdated, does not meet, nor conform to the best interests of the residents of Southern Labrador or that of the province of NL going forward. Nor does it fit the expectation and standards of future generations need for clean green energy demands in Southern Labrador.

It is my suggestion that NL Hydro complete the section of 25 kV line from Port Hope Simpson to Charlottetown, thereby eliminating the need to construct a new plant, as it is a "deemed" requirement to have a 25 kV line installed to Charlottetown in all alternatives proposed. NL Hydro can then supplement the power generation required in Port Hope Simpson with the use of "Mobile units", until a more clearly defined long-term power plan option for Southern Labrador is determined and developed. In hindsight, these transmission lines should have been built long before now, and we would not be in the position of having to confront the huge upfront construction costs now being proposed by NL Hydro.

I feel that NL Hydro, needs to re-do its plan and start with an engaged consultation process with the residents in Southern Labrador before proposing their own 20 year-old "Dusted of the Self" plan and create a more modern regional comprehensive plan to address not only the future energy needs in Southern Labrador, but also incorporate the communities of Cartwright, Paradise River, Norman Bay, and the Labrador Straits area in this plan.

Thank you for your time,