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February 3, 2022

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: Network Additions Policy – Implementation Update

On March 17, 2021, the Board of Commissioners of Public Utilities ("Board") approved Newfoundland and Labrador Hydro's ("Hydro") Network Additions Policy for the Labrador Interconnected System, effective April 1, 2021.[1]

Firm Loads

Following approval of the Network Additions Policy, Hydro formalized customer requests for incremental firm load in Labrador. This process included reaching out to customers whose applications were previously denied, as well as those that had informally advised of interest in obtaining service in Labrador but had yet to formally apply.[2] Customers were asked to submit their interconnection requirements, including firm load and region requirements to allow Hydro to proceed with a High Level System Impact Analysis; Hydro received requests for approximately 8,000 MW of firm load on the Labrador Interconnected System. Hydro did not study the impact of the 8,000 MW requested as it does not have adequate information available to provide reasonably reliable cost estimates for serving 8,000 MW of additional load; however, to provide reasonable cost estimates for the provision of firm service, Hydro completed a high-level impact analysis to determine cost estimates for the transmission and generation additions that would be required to serve incremental loads of 300, 650, and 1,000 MW for each of the three regions in Labrador. Table 1 provides a summary of the results of this analysis.

Table 1: Summary of High-Level Impact Analysis

Total Incremental Load (MW)	Cost of Generation Upgrades ($ Million)	Cost of Transmission Upgrades to Supply Incremental Load in Each Region		
		Labrador East Region ($ Million)	Labrador Central Region ($ Million)	Labrador West Region ($ Million)
300	764	113	43	347
650	3,360	132	86	480
1,000	5,976	160	93	821

[1] Board Order No. P.U. 7(2021).
[2] Hydro also provided information regarding the approved Network Additions Policy and Hydro's steps to determine load requirements in Labrador to town representatives for Happy Valley-Goose Bay, Labrador City, and Wabush, as well as the Labrador West Chamber of Commerce and the Labrador North Chamber of Commerce. Hydro further posted this information on its website.

Hydro communicated the results of this analysis to applicants in the fall of 2021 and requested confirmation of interest from those wishing to proceed with detailed system impact studies for firm service as well as a deposit of $1,000 per MW to be applied to the cost of such studies. Hydro received confirmation from 25 customers for service totalling approximately 2,000 MW as of February 1, 2022. Table 2 provides a summary of firm capacity initially requested and subsequently confirmed by region.

Table 2: Firm Capacity Requested and Confirmed by Region

	Initial Requests		Requests Confirmed	
	Capacity Requested (MW)	**Number of Applicants**	**Capacity Requested (MW)**	**Number of Applicants**
Labrador East	551	15	882	13
Labrador Central	1,141	6	527	5
Labrador West	6,227	31	581	7
Total	**7,919**	**52**	**1,990**	**25**

The capacity requested on the Labrador Interconnected System exceeds the amount of generation currently available (approximately 50 MW) and would require material investment in incremental supply resources if the current level of applicant interest is fully realized.

Study Requirements – Firm Loads

Prior to applying applicants' deposits to advance the system impact studies, Hydro believes it is appropriate to communicate to applicants the magnitude of generation investment anticipated to be required to serve the total requested firm load and the projected cost of supply and associated rates for the applicants. It is Hydro's expectation that being transparent with such costs and offering the opportunity for applicants to once again confirm their interest will result in a more reliable indication of firm capacity requirements, enabling the system impact studies to produce meaningful results.

Following confirmation from applicants, Hydro will begin the system impact studies which will identify the transmission system upgrades required.

Firm Load Implications to the Reliability and Resource Adequacy Study Review

Hydro acknowledges the significant impact of load additions in Labrador to the ongoing *Reliability and Resource Adequacy Study Review* ("RRA"). Additional sources of capacity and energy within the provincial power system, particularly if located within the Island Interconnected System, could help to improve the reliability of supply for customers in consideration of potential risks associated with the Labrador-Island Link. Hydro also acknowledges that it is not acceptable to delay the advancement of the RRA while awaiting the outcomes of the detailed system impact studies and facilities studies described above. To ensure the effective progression of the RRA toward a conclusion, Hydro will take the following action:

(i) Generation planning analyses that will be completed as part of the RRA will include sensitivity cases where incremental customer load is added to forecasts. These cases will be established on the basis of ongoing discussions with the firm load applicants described above.

(ii) The sensitivity cases will be developed and assessed such that requirements for incremental energy and capacity will be determined on the basis of planning criteria and parameters that will be presented and reviewed as part of study outcomes. All analysis, results and planning

considerations will be presented in Hydro's RRA report that is scheduled to be filed on August 31, 2022.

(iii) In parallel to the above, Hydro will advance engineering efforts associated with options for additional generating sources for the provincial power system. This includes the completion of the detailed condition assessment for the Holyrood Thermal Generating Station, to be submitted to the Board in the first quarter of 2022, and continued efforts associated with new sources of generation in support of the planning analysis described above.

(iv) Hydro will continue to progress discussions with firm load applicants throughout the system impact study process. As applicants are provided with detailed estimates of transmission expansion and supply costs, interconnection agreements would be established. If interconnection agreements reflecting material load additions are executed, Hydro would proceed to seek Board approval for additional generation. Such an application would be founded on the expansion plans, planning criteria, and parameters presented and reviewed as part of the August submission.

Non-Firm Rate Option

On June 30, 2021, Hydro filed with the Board a report with respect to the feasibility of the addition of a non-firm rate option to the Network Additions Policy outlining the capacity which could potentially be made available on a non-firm basis as well as considerations regarding the required attributes of potential non-firm service.

In the fall of 2021, Hydro solicited applications from interested customers and received 17 requests for total capacity which exceeded available non-firm capacity for all seasons in both Labrador East and Labrador West. Table 3 compares non-firm capacity requested to non-firm capacity available.

Table 3: Non-Firm Capacity Requested vs. Available

	Winter December to March	Spring April to June	Summer July to September	Fall October to November
Labrador East				
Total Available	28	42	58	38
Total Requested	199	224	236	217
Labrador West				
Total Available	20	50	50	50
Total Requested	121	211	211	211

As interest in the non-firm option exceeded the available non-firm capacity in both regions, applicants were allocated non-firm capacity on an equal basis for each season. Hydro communicated the potential allocated non-firm capacity and requested deposits from applicants to enable Hydro to complete the assessments required to estimate the cost of connecting each customer to the transmission system. At that time, several customers withdrew their request for non-firm capacity. Hydro then reallocated the potential non-firm capacity amongst the remaining applicants.

Study Requirements – Non-Firm Loads

There is no existing transmission infrastructure near applicants' facilities in Labrador East. As such, non-firm applicants have been advised that they will be required to fund new infrastructure required for

interconnection. High-level preliminary estimates indicate the required infrastructure could cost in the range of $6–$10 million, with potential to exceed the $10 million noted. Applicants will also be required to fund any terminal station costs, if required. Given the magnitude of these costs, prior to advancing interconnection studies in Labrador East, Hydro will prepare a design concept and more refined cost estimates to share with applicants. From there, applicants will be required to confirm their desire to proceed with the interconnection study.

In Labrador West, Hydro will proceed directly to interconnection studies as there are existing 46 kV transmission lines near the applicants' facilities. Applicants will be provided with an estimate of the cost to connect their facilities to the 46 kV system upon completion of the interconnection study.

Hydro anticipates that all non-firm studies will be complete by the end of the second quarter of 2022.

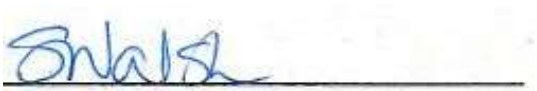
Future Regulatory Requirements

Hydro anticipates filing an application for approval of the non-firm rate option on the Labrador Interconnected System following completion of the necessary studies. Additionally, prior to construction of any interconnection facilities for firm or non-firm service, Hydro will apply to the Board for approval of (i) capital projects and (ii) customer contributions associated with interconnection costs. Any requirement for incremental supply would also be subject to Board approval.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO



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