

1 Q. **Re: Non-Firm Rate Presentation, page 15; Non-Firm Rate Application, pages 22 (pdf) and 38-39**
2 **(pdf)**

3 Citation 1 (presentation):

4 Non-firm energy use does not contribute to investments in common system capacity;
5 therefore, no demand charge proposed.

6 Citation 2 (p. 22):

7 While the non-firm customers will not pay explicitly for the use of the common
8 transmission facilities system through customer rates, they will be subject to the pricing
9 variability in the energy markets and may at times pay charges for non-firm energy in
10 excess of the published firm energy rates. This would be expected to occur frequently in
11 Labrador where the firm electricity rates are among the lowest in North America.
12 Therefore, Hydro is proposing not to apply a demand charge for the use of non-firm
13 service. This approach is consistent with the pricing for surplus/additional energy in
14 other Canadian jurisdictions. The proposed approach will provide for increased revenue
15 from non-firm sales to offset the estimated reduction in net exports due to those
16 increased non-firm sales. (underlining added)

17 Citation 3 (application pp. 38-39):

18 As the non-firm customers would use the transmission system, Hydro believes it would
19 be appropriate for the customers to pay a transmission demand charge based on the
20 average embedded cost of demand. This is currently \$1.08 per kW on the Labrador
21 Interconnected System. As this service is non-firm, the rate would apply to the
22 maximum monthly demand and would not apply to the maximum annual demand as is
23 the case for firm demand. (underlining added)

24 Citation 4 (PUB-NLH-006):

25 Newfoundland and Labrador Hydro ("Hydro") changed its position on whether it should
26 apply a demand charge for non-firm service based on the review of the pricing approach
27 of surplus/additional energy conducted by Christensen Associates Energy Consulting,
28 LLC ("CA Energy Consulting") which is provided in Schedule 1, Attachment 2.1 The CA
29 Energy Consulting review indicated that no demand charges are applied in the sale of
30 surplus/additional energy by BC Hydro, Manitoba Hydro, NB Power and Hydro-Québec.
31 Hydro also notes that the application of a demand charge is not consistent with an
32 incremental cost approach to pricing for non-firm energy. There are no incremental
33 common transmission or generation capacity costs as a result of the provision of the
34 proposed non-firm service.

35 a) Does the reference in Citation 4 to BC Hydro, Manitoba Hydro, NB Power and Hydro-
36 Quebec refer to Table 1 of the Christensen report (Application, p. 60 of pdf)? If not,
37 please specify the source(s) of the statement.

- 1 **b)** Please confirm that the incremental rate structures referred to in Citation 4 of in Table 1
2 apply only, or primarily, to incremental energy for existing firm customers. If any of
3 them apply to new, “incremental energy only” customers, please provide additional
4 details.
- 5 **c)** Please elaborate on Hydro’s view “that the application of a demand charge is not
6 consistent with an incremental cost approach to pricing for non-firm energy”. Is this
7 view expressed by Christensen?
- 8 **d)** Please confirm that, unlike a firm customer taking additional energy at an incremental
9 rate, a non-firm customer under the proposed non-firm tariff would make no
10 contribution to system fixed costs.
- 11 **e)** What economic benefits, if any, would be provided to existing ratepayers by the
12 provision of service to new customers under the proposed non-firm rate?
- 13
- 14 A. **a)** Yes, the reference in Citation 4 to BC Hydro,¹ Manitoba Hydro,² NB Power³ and Hydro-
15 Québec⁴ refers to Table 1 of the non-firm rates review conducted by Christensen Associates
16 Energy Consulting, provided as Schedule 1, Attachment 2 of this application.⁵
- 17 **b)** Table 1 provides a detailed understanding of the eligibility for these incremental rate
18 structures.

Table 1: Incremental Rate Availability

Rate	Available To
BC Hydro – Freshet Energy ⁶ 1892 and BC Hydro – Incremental Energy 1893	For Customers supplied with Electricity under Rate Schedule 1823 (Transmission Service – Stepped Rate) or Rate Schedule 1828. (Transmission Service – Biomass Energy Program) that increase their Electricity usage during the Freshet Period.

¹ The British Columbia Hydro and Power Authority ("BC Hydro").

² The Manitoba Hydro-Electric Board ("Manitoba Hydro").

³ New Brunswick Power Corporation ("NB Power").

⁴ There is a separate division under Hydro-Québec called Hydro-Québec TransÉnergie.

⁵ "Application for a Non-Firm Rate for Labrador," Newfoundland and Labrador Hydro, rev. March 29, 2023 (originally filed September 15, 2022), sch. 1, att. 2, p. 8 of 19.

⁶ Canada (2017–2023), *Electric Tariff*, British Columbia Hydro and Power Authority, pp. 5-29 and 5-38.

<<https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/tariff-filings/electric-tariff/bchydro-electric-tariff.pdf>>

Rate	Available To
	<p>If a Customer is eligible to take service under either Rate Schedule 1892 (Freshet Energy) and Rate Schedule 1893 (Incremental Energy Rate), the Customer may only take one service.</p> <p>Therefore these rates are only available to existing firm customers, as they are only available to customer availing of Rate Schedule 1823 or 1893.</p>
Manitoba Hydro Surplus Energy Program ⁷	<p>The Manitoba Hydro Surplus Energy Plan is currently closed to new enrollments. However, Customers that were able to avail of the options under the program must have met the following criteria to be considered eligible;</p> <p>Option 1: Available to industrial loads with total demand of 1,000 kVA or greater. Limit of 50 MVA, unless load factor exceeds 25% weekly. Not served under Curtailable Rate Program. Minimum power factor of 90% may be required.</p> <p>Option 2: Available to heating loads with demand of 200 kW or greater. Strictly for space and/or water heating. Requires separate metering and alternate energy source for backup. Limit of 50 MVA, unless load factor exceeds 25% weekly. Not served under Curtailable Rate Program.</p> <p>Option 3: Available to electric loads with demand between 200 kW and 50,000 kW. Requires on-site backup generating equipment. Intermittent industrial load that can be deferred if backup maintenance is needed. Requires separate metering. Not served under Curtailable Rate Program. Minimum power factor of 90% may be required.</p> <p>The requirement for customers to demonstrate their load usage in order to avail of these programs suggests that they are designed for existing 'Firm' customers. These programs appear to be designed for customers who already have an established relationship as they would possess historical load data and a proven track record of usage, which is used in determining eligibility.</p>
Hydro-Québec – Additional Electricity Options ⁸	<p>The Hydro-Québec – Electricity Additional Electricity Option is available to medium-power customers that use “Rate M” or “G9” (maximum power demand has reached 50 kilowatts) and would like to extend their consumption to fill a short term order or meet an exceptional need. It is also available to large power customers that currently use “Rate L” or “LG” (contract power is 5,000 kilowatts or more).</p> <p>Therefore these incremental rates are only available to existing firm customers.</p>

⁷ “2023/24 & 2024/25 General Rate Application,” The Manitoba Hydro-Electric Board, December 21, 2022, app. 8.16.
 <https://www.hydro.mb.ca/docs/regulatory_affairs/pdf/electric/gra_2023_2025/08-16_surplus_energy.pdf>

⁸ Hydro-Québec “Additional Electricity Option for medium-power customers,”
 <<https://www.hydroquebec.com/business/customer-space/rates/additional-electricity-option-medium-power-customers.html>>, Hydro-Québec “Additional Electricity Option for large-power customers,”
 <<https://www.hydroquebec.com/business/customer-space/rates/additional-electricity-option-large-power-customers.html>>.

Rate	Available To
NB Power – Surplus Energy ⁹	<p>Surplus Energy is closed to new, long term load requests since January 1, 2021. However, NB Power still reserves the right to issue up to 100 MW of additional Surplus Energy temporarily for a contract duration of up to three (3) years. NB Power states that “Surplus Energy is supplied only if it can be provided with available resources over and above the requirement of other firm commitments. The Customer must interrupt Surplus Energy use within ten (10) minutes of a request from NB Power. Customers who currently purchase Surplus Energy above a defined load level can continue to do so for that load.</p> <p>The available information does not provide sufficient details to determine if “incremental energy only” customers can purchase the surplus energy, however, the language described above indicates that all surplus energy customers have a firm contract as well.</p>

- 1 **c)** Newfoundland and Labrador Hydro’s (“Hydro”) statement in this context reflects its view
2 that, if a utility pledges not to serve customer demand for incremental load when
3 generation or transmission capacity does not permit safe delivery, it would not be
4 theoretically consistent to impose charges for capacity on customers. Industry practice
5 reinforces this principle. The report by Christensen Associates Energy Consulting did not
6 offer an opinion as to whether the application of a demand charge to non-firm pricing would
7 be inconsistent in all circumstances. The report identified three candidate non-firm designs,
8 one for interruptible/curtailable pricing and two for incremental service pricing. These
9 designs did not explore, nor indicate the need for, potential use of a demand charge.
- 10 **d)** It is confirmed that a non-firm customer under the proposed tariff would make no
11 contribution to system fixed costs. However, depending upon the market value of exports,
12 the rates paid by these customers can be materially in excess of fixed system costs.
- 13 **e)** The provision of non-firm service to new customers will not provide cost savings to
14 ratepayers on the Labrador Interconnected System. In its revised application,¹⁰ Hydro has

⁹ Énergie NB Power, N. Rate Schedules and Rate Application Guidelines,”
<<https://www.nbpower.com/en/accounts-billing/understanding-your-bill/rate-schedules-and-policies/n-rate-schedules-and-rate-application-guidelines>>.

¹⁰ “Application for a Non-Firm Rate for Labrador,” Newfoundland and Labrador Hydro, rev. March 29, 2023 (originally filed September 15, 2022).

- 1 proposed non-firm service revenues provide rate mitigation benefits to customers on the
- 2 Island Interconnected System.