

1 Q. **Reference: Application, 2024 Capital Budget Overview (page 7)**

2 It is stated

3 Hydro considers many factors in the selection of the projects and program for
4 inclusion in its budget, including operational risks, ability to execute, total
5 investment, and cumulative risk associated with balancing aging assets while
6 providing least-cost reliable service in an environmentally responsible manner.
7 The focus of the 2024 CBA is to maintain the expected level of reliability while
8 ensuring prudent and reasonable expenditures reflective of our capital plan
9 considerations.

10 a) What is the “expected level of reliability”?

11 b) Specifically, what is Hydro’s mandate?

12 c) Please provide Hydro’s definition of “reliable service” and all reliability criteria used to
13 define “reliable service”.

14 d) Did Hydro incorporate the requirement that projects be undertaken in an
15 environmentally responsible manner in the 2024 CBA? Please cite such references.

16 e) Is it a requirement under current provincial legislation and the Provisional Capital
17 Budget Application Guidelines that Hydro provide service commensurate with the value
18 its customers place on service?

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21 A. a) Newfoundland and Labrador Hydro (“Hydro”) has a legislated mandate of providing least-
22 cost, reliable service in an environmentally responsible manner. While balancing these
23 criteria, Hydro seeks to at a minimum, maintain, if not improve, upon its current levels of
24 reliability where it is in the best interests of its customers. Hydro worked to ensure that the
25 proposals in its 2024 Capital Budget Application (“2024 CBA”) appropriately balanced these
26 criteria as it evaluates infrastructure and operational planning in order to meet its obligation
27 for the provision of least-cost, reliable, and environmentally responsible electricity to its
28 customers.

1 **b)** Hydro operates consistent with its obligations under the *Public Utilities Act (“Act”)*¹ and the
2 *Electrical Power Control Act, 1994 (“EPCA”)*,² particularly the power policy of the province as
3 set out in Section 3 of the *EPCA*, more specifically the mandate in Section 3(b)(iii) of the
4 *EPCA*, to manage and operate its production, transmission, and distribution facilities in a
5 manner that results in power being delivered to consumers at the lowest possible cost in an
6 environmentally responsible manner, consistent with reliable service.

7 **c)** As Hydro has noted in previous capital budget proceedings,³ Hydro strives to provide
8 electrical service to its customers that meets its mandate and complies with good utility
9 practice. To measure its performance, Hydro uses reliability metrics such as:

- 10 • **Weighted Capability Factor:** A reliability indicator for generation assets that measures
11 the percentage of the time that a unit or a group of units is available to supply power at
12 maximum continuous rating. The measure is used for Hydro’s thermal, gas turbine, and
13 hydroelectric generation. This measure is weighted to reflect the differences in
14 generating unit capacity, such that larger units have a greater impact on the measure.
- 15 • **Derated Adjusted Forced Outage Rate:** A performance metric that measures the
16 percentage of the time that a unit or group of units is unable to generate at its
17 maximum continuous rating due to forced outages or unit deratings. This measure
18 applies only to Hydro’s thermal and hydroelectric generation. This measure is weighted
19 to reflect the differences in generating unit capacity, such that larger units have a
20 greater impact on the measure.
- 21 • **Utilization Forced Outage Probability:** A performance metric that measures the
22 probability that a generating unit or group of units will encounter a forced outage and
23 not be available when required. This measure applies only to Hydro’s gas turbine
24 generating units.
- 25 • **Derated Adjusted Utilization Forced Outage Probability:** A performance metric that
26 measures the probability that a generating unit or group of units will encounter a forced
27 outage and not be available when required or will be unable to generate at its maximum

¹ *Public Utilities Act*, RSNL 1990, c P-47.

² *Electrical Power Control Act, 1994*, SNL 1994, c E-51.

³ Please refer to Hydro’s response to CA-NLH-043 from the 2023 Capital Budget Application proceeding.

< <http://www.pub.nl.ca/applications/NLH2023Capital/responses/CA-NLH-043.PDF>>.

- 1 continuous rating due to deratings. This measure applies only to Hydro's gas turbine
2 generating units.
- 3 • Transmission-System Average Interruption Duration Index: A reliability indicator for bulk
4 transmission assets that measures the average duration of outages in minutes per
5 delivery point.
 - 6 • Transmission-System Average Interruption Frequency Index: A reliability indicator for
7 bulk transmission assets that measures the average frequency of outages per delivery
8 point.
 - 9 • Transmission-System Average Restoration Index: A reliability indicator for bulk
10 transmission assets that measures the average duration per transmission interruption.
 - 11 • Distribution System Average Interruption Duration Index ("SAIDI") and System Average
12 Interruption Frequency Index ("SAIFI"): Reliability indicators that measure the duration
13 and frequency of service interruptions to Hydro's isolated and interconnected systems.
 - 14 • End-Consumer SAIDI and SAIFI: Reliability indicators that measure the duration and
15 frequency of service interruptions to all end-consumers of electricity in the province
16 who are supplied by Hydro, other than Hydro's Industrial customers.
 - 17 • Under-Frequency Load Shedding Events: measures the number of events in which
18 shedding of customer load is required to counteract the loss of generation capacity.

19 Hydro sets targets and reports its performance on these metrics to the Board of
20 Commissioners of Public Utilities ("Board") as part of its Quarterly Regulatory Reports⁴ and
21 Quarterly Reports on the Performance of Generating Units.⁵ Where possible, Hydro
22 compares its performance to that of an Electricity Canada benchmark to ensure its
23 performance is aligned with good utility practice.

24 **d)** Hydro has a legislated mandate of providing least-cost, reliable service in an
25 environmentally responsible manner. As these priorities can compete with each other,

⁴ Hydro's Quarterly Regulatory Reports can be accessed at
<<http://pub.nl.ca/indexreportspages/quarterlyregulatory.php>>.

⁵ Hydro's Quarterly Report on Performance of Generating Units can be accessed at
<<http://pub.nl.ca/indexreportspages/12MonthRollingAverage.php>>.

1 Hydro ensured that the proposals in its 2024 CBA appropriately balanced these criteria as it
2 evaluates infrastructure and operational planning to meet its obligation for the provision of
3 least-cost electricity to its customers.

4 As it had done prior to the change in legislation, Hydro incorporated the requirement to
5 consider environmental responsibility in the 2024 CBA. For example, in determining
6 whether a capital proposal is appropriate, Hydro gives consideration to, among other things,
7 environmental risk and the degree of expected mitigation. In line with its mandate, Hydro
8 does not regard the environmental criteria in isolation but rather aims to balance each of its
9 legislated objectives.

10 As such, Hydro believes the proposals within its 2024 CBA meet Hydro's mandate to provide
11 power at the lowest possible cost, consistent with reliable service, in an environmentally
12 responsible manner.

13 e) As noted herein, Hydro is bound by the obligations set out in the *Act* and the *EPCA* to
14 manage and operate its production, transmission, and distribution facilities in a manner that
15 would result in power being delivered to consumers in the province at the lowest possible
16 cost, in an environmentally responsible manner, consistent with reliable service. As Hydro
17 noted in its response to CA-NLH-033 from the 2023 Capital Budget Application proceeding,⁶
18 Section 80 of the *Act* allows a utility to earn a "just and reasonable" return as determined by
19 the Board. Justice Green of the Newfoundland and Labrador Court of Appeal noted that

20 This statutory entitlement of the utility to earn a "just and reasonable"
21 return is the linguistic touchstone for the balancing exercise. This phrase
22 emphasizes the fairness aspect, both to the utility, in earning sufficient
23 revenues to make its continued investment worthwhile and to maintain
24 its credit rating in financial markets, and to the consumer, in obtaining
25 adequate service at reasonable rates. It also emphasizes the need for a
26 tempering of each interest group's economic imperative by
27 consideration of the interests of the other.⁷

⁶ Please refer to Hydro's response to CA-NLH-033 from the 2023 Capital Budget Application proceeding.
<<http://www.pub.nl.ca/applications/NLH2023Capital/responses/CA-NLH-033.PDF>>.

⁷ Section 101 of the *Public Utilities Act* (Newfoundland) (Re), 1998 CanLII 18064 (NL CA), para. 23.

- 1 Hydro does consider customer impact when making capital investment decisions and strives to
- 2 achieve the appropriate balance between cost and reliability.