Q. **Reference: Application, 2023 Capital Budget Overview, page 1**

It is stated "Hydro is committed to investing in capital in a manner which meets its obligation to provide reliable service at the lowest possible cost, and to provide service and facilities which are reasonably safe and adequate and just and reasonable."

a) How does Hydro define "reliable service" at the generation, transmission and distribution levels?

b) How does Hydro define "lowest possible cost"?

c) How does Hydro define "reasonably safe"?

d) How does Hydro define "reasonably adequate"?

e) How does Hydro define "just and reasonable"?

A. **a)** Newfoundland and Labrador Hydro ("Hydro") strives to provide electrical service to its customers that meets its mandate and complies with good utility practice. To measure its performance, Hydro uses reliability metrics such as:

- Weighted Capability Factor: A reliability indicator for generation assets which measures the percentage of the time that a unit or a group of units is available to supply power at maximum continuous rating. The measure is used for Hydro's thermal, gas turbine, and hydroelectric generation. This measure is weighted to reflect the differences in generating unit capacity, such that larger units have a greater impact on the measure.

- Derated Adjusted Forced Outage Rate ("DAFOR"): A performance metric that measures the percentage of the time that a unit or group of units is unable to generate at its maximum continuous rating due to forced outages or unit deratings. This measure applies only to Hydro's thermal and hydroelectric generation. This measure is weighted to reflect the differences in generating unit capacity, such that larger units have a greater impact on the measure.

- Utilization Forced Outage Probability ("UFOP"): A performance metric that measures the probability that a generating unit or group of units will encounter a forced outage and not be available when required. This measure applies only to Hydro's gas turbine generating units.

- Derated Adjusted Utilization Forced Outage Probability ("DAUFOP"): A performance metric that measures the probability that a generating unit or group of units will encounter a forced outage and not be available when required or will be unable to generate at its maximum continuous rating due to deratings. This measure applies only to Hydro's gas turbine generating units.

- Transmission-System Average Interruption Duration Index ("T-SAIDI"): A reliability indicator for bulk transmission assets which measures the average duration of outages in minutes per delivery point.

- Transmission-System Average Interruption Frequency Index ("T-SAIFI"): A reliability indicator for bulk transmission assets which measures the average frequency of outages per delivery point.

- Transmission-System Average Restoration Index ("T-SARI"): A reliability indicator for bulk transmission assets which measures the average duration per transmission interruption.

- Distribution System Average Interruption Duration Index ("SAIDI") and System Average Interruption Frequency Index ("SAIFI"): Reliability indicators which measure the duration and frequency of service interruptions to Hydro's isolated and interconnected systems.

- End-Consumer SAIDI and SAIFI: Reliability indicators which measure the duration and frequency of service interruptions to all end-consumers of electricity in the province who are supplied by Hydro, other than Hydro's Industrial customers.

- Under Frequency Load Shedding ("UFLS") Events: measures the number of events in which shedding of customer load is required to counteract loss of generation capacity.

Hydro sets targets and reports its performance on these metrics to the Board of Commissioners of Public Utilities as part of its Quarterly Regulatory Report and Quarterly Report on Performance of Generating Units. Where possible, Hydro compares its performance to that of an Electricity Canada benchmark to ensure its performance is aligned with good utility practice.

b) Hydro does not define "lowest possible cost" in isolation. Section 3(b)(iii) of the *Electrical Power Control Act, 1994*[1] ("*EPCA*") requires Hydro to manage and operate its production, transmission, and distribution facilities in a manner that results in power being delivered to consumers at the lowest possible cost consistent with reliable service. As a result, Hydro does not define "lowest possible cost" to be necessarily the most inexpensive option. When making capital investment decisions, Hydro strives to achieve the appropriate balance between cost and reliability to provide reliable service to customers as economically as possible.

c) The term "reasonably safe" was reviewed by the Newfoundland and Labrador Court of Appeal in *Newfoundland Light and Power Co. Ltd. v. Furlong Estate*, 2005 NLCA 25 (CanLII). Justice Welsh determined that the "reasonably safe" standard is consistent with the requirement "to take proper precautions against injury" as referenced in a previous Supreme Court of Canada decision.[2] However, it is a lower standard than one requiring "the greatest possible care" and "every possible precaution". Justice Welsh found this to also be consistent with the specific requirements set out in section 44 of the *Public Utilities Act*[3] for a utility to maintain its equipment.

d) The dictionary definition of adequate is "satisfactory or acceptable in quality or quantity". The term "reasonably adequate" is utilized in the *Public Utilities Act* to describe the level of service the Utility is required to provide. Qualifying the term adequate with "reasonably", in consideration of Justice Welsh's determination in the Court of Appeal case, referenced in part c) of this response, would indicate that Hydro is required to provide service which is

[1] *Electrical Power Control Act, 1994*, SNL 1994, c E-5.1.
[2] 1976 CanLII 160 (SCC), [1977] 1 S.C.R. 500, <https://canlii.ca/t/1z6fm>.
[3] *Public Utilities Act*, RSNL 1990, c P-47.

satisfactory or acceptable, without needing to reach the standard of the greatest possible service.

e) The interpretation of legislation should include the liberal interpretation of the language that best ensures the underlying purpose of the legislation is met.[4] The plain language definition of "just" includes "fair" and the definition of "reasonable" includes "fair", "practical" and "not excessive". In the context of the provision stipulating that the utility must provide service and facilities which are ". . . reasonably safe and adequate and just and reasonable. . ." Hydro's interpretation of the phrase is that service must be fair and practical in the context of being reasonably safe and adequate.

Hydro believes this is consistent with the discussion of the phrase, in the context of Section 80 of the *Public Utilities Act*, by the Newfoundland and Labrador Court of Appeal in Section 101 of the *Public Utilities Act (Newfoundland) (Re)*, 1998 CanLII 18064 (NL CA), wherein Justice Green stated:

> This statutory entitlement of the utility to earn a "just and reasonable" return is the linguistic touchstone for the balancing exercise. This phrase emphasizes the fairness aspect, both to the utility, in earning sufficient revenues to make its continued investment worthwhile and to maintain its credit rating in financial markets, and to the consumer, in obtaining adequate service at reasonable rates. It also emphasizes the need for a tempering of each interest group's economic imperative by consideration of the interests of the other.[5] [Emphasis added]

[4] *Interpretation Act*, RSNL 1990, c I-19, s. 16, and Section 101 of the *Public Utilities Act* (Newfoundland) (Re), 1998 CanLII 18064 (NL CA), para. 22, <https://canlii.ca/t/27pwh>.
[5] Section 101 of the *Public Utilities Act* (Newfoundland) (Re), 1998 CanLII 18064 (NL CA), para. 23, <https://canlii.ca/t/27pwh>.