

Office of the Consumer Advocate

PO Box 23135
Terrace on the Square
St. John's, NL Canada
A1B 4J9

Tel: 709-724-3800
Fax: 709-754-3800

August 29, 2024

Via Email

The Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
St. John's, NL A1A 5B2

Attention: Jo Galarneau
Executive Director and Board Secretary

Dear Ms. Galarneau:

Re: Newfoundland and Labrador Hydro - 2025 Capital Budget Application
- Requests for Information CA-NLH-001 to CA-NLH-085

Further to the above-captioned, enclosed are the Consumer Advocate's Requests for Information numbered CA-NLH-001 to CA-NLH-085.

If you have any questions regarding the enclosed, please contact the undersigned at your convenience.

Yours truly,



Dennis Browne, KC
Consumer Advocate

Encl.
/bb

cc **Newfoundland & Labrador Hydro**
Shirley Walsh (ShirleyWalsh@nlh.nl.ca)
NLH Regulatory (nlhregulatory@nlh.nl.ca)

Newfoundland Power Inc.
Dominic J. Foley (dfoley@newfoundlandpower.com)
NP Regulatory (regulatory@newfoundlandpower.com)

Island Industrial Customers Group
Paul Coxworthy (pcoxworthy@stewartmckelvey.com)
Dean Porter (dporter@poolcalthouse.ca)
Denis Fleming (dfleming@coxandpalmer.com)

Board of Commissioners of Public Utilities
Jacqui Glynn (jglynn@pub.nl.ca)
Colleen Jones (cjones@pub.nl.ca)
Katie Philpott (kphilpott@pub.nl.ca)
Board General (board@pub.nl.ca)

IN THE MATTER OF the *Public Utilities Act* (the "*Act*"); and

IN THE MATTER OF an Application by Newfoundland and Labrador Hydro ("Hydro") for approval of (i) its capital budget for 2025 pursuant to Section 41(1) of the Act; (ii) its proposed capital purchases and construction projects for 2025 in excess of \$750,000.00, pursuant to Section 41(3)(a) of the Act; (iii) contributions by certain Customers for contributions towards the cost of improvements to certain property, pursuant to Section 41(5) of the Act, and (iv) for an Order, pursuant to Section 78 of the Act, fixing and determining its average rate base for 2023.

**CONSUMER ADVOCATE
REQUESTS FOR INFORMATION
CA-NLH-001 to CA-NLH-085**

Issued: August 29, 2024

- 1 CA-NLH-001 (Reference Application) With respect to projects and programs with costs less
 2 than \$750,000:
 3 a) Can Hydro proceed with any project that costs less than \$750,000 without
 4 first gaining Board approval, with the costs of such projects and programs
 5 passed-through to customers whether or not the project is shown to be
 6 prudent? How will the prudence of such projects be audited? Will Board
 7 approval be required in order for such spending to be included in rate base?
 8 b) How is the \$750,000 threshold applied; e.g., to individual projects, projects
 9 that are a component of a larger program, projects that might be a
 10 component of a larger project; e.g., replacement of a faulty breaker at a
 11 substation that is undergoing refurbishment?
 12
- 13 CA-NLH-002 (Reference Application, clause 12) It is stated “*There are a number of projects*
 14 *proposed within Hydro’s 2025 Capital Budget Application related to assets*
 15 *that serve only one Hydro customer. Hydro’s practice regarding assets that*
 16 *serve only one Hydro customer is that the costs of construction and ongoing*
 17 *maintenance of those assets are the responsibility of that customer. Those*
 18 *costs are not borne by other customers through rates or otherwise.”*
- 19 a) Who owns the specifically-assigned assets – Hydro or the benefitting
 20 customer?
 21 b) How are the costs of specifically-assigned assets recovered from the
 22 benefitting customer?
 23 c) Does Hydro operate and maintain these assets on behalf of the benefitting
 24 customer, and if so, how does Hydro determine operating and maintenance
 25 costs and recover the costs from the benefitting customer?
 26 d) Does Hydro have connection agreements with each of these customers that
 27 address cost recovery and the responsibilities of Hydro and the benefitting
 28 customer with respect to the specifically-assigned assets?
 29 e) How are the costs of specifically-assigned assets treated in the cost of
 30 service study?
 31 f) Are the costs of these assets included in rate base?
 32
- 33 CA-NLH-003 (Reference Application) Please provide a table of annual values from 1993 to
 34 2023 for the following items: Hydro’s net plant investment, Hydro’s rate base,
 35 the number of Hydro customers, the GDP deflator, net plant investment
 36 expressed in real terms using the GDP deflator, rate base expressed in real
 37 terms using the GDP deflator, net plant in real terms per customer, and real
 38 rate base per customer.
 39
- 40 CA-NLH-004 (Reference Application) Please provide a table of the annual values from the
 41 years 1993 to 2025 for the following items: Hydro’s total capital expenditure,
 42 the GDP deflator, Hydro’s total capital expenditure expressed in real terms
 43 using the GDP deflator, the number of Hydro customers, Hydro real capital
 44 expenditures per customer. For 2024 and 2025 use the Conference Board of

1 Canada's forecast for GDP deflator; for 2024 use Hydro's estimate of total
2 spending and for 2025 use Hydro's 2025 CBA figures.

3
4 CA-NLH-005 (Reference Application) Please provide a table showing regulated rate base,
5 revenue requirement, capital budget amount proposed, capital budget amount
6 approved, capital budget amounts expended, and year-over-year rate change
7 for each of the last 20 years and forecast for the years 2024 through 2029.

8
9 CA-NLH-006 (Reference Application) Please provide a list of the dates for all hearings that
10 the Board has held on Hydro capital budget applications in the past 25 years.

11
12 CA-NLH-007 (Reference Application) Please provide a table identifying each
13 project/program in the 2025 capital budget, its cost and the customers that are
14 required to pay for the project; i.e., ~~Island Interconnected, Labrador~~
15 ~~Interconnected and Rural/Isolated~~. In cases when more than one customer
16 group is required to pay for a project/program, please identify the share of the
17 cost paid by each.

18
19 CA-NLH-008 (Reference Application) Please provide the most recent figures available
20 relating to amounts owed or to be credited to consumers for each of Hydro's
21 deferral accounts.

22
23 CA-NLH-009 (Reference Application) With respect to the Island Interconnected System,
24 please provide:

- 25 a) A table, starting with 2010, that contains the annual production from
26 Hydro's hydraulic generation, Holyrood TGS, other thermal generation,
27 power purchases via the LIL, power purchases imported via the Maritime
28 Link, other power purchases, total island interconnected customer load,
29 and total customer load including Maritime link exports.
30 b) Commencing January 2016 and up to August 2024, in an Excel file please
31 provide the monthly values of LIL deliveries to the Island Interconnected
32 System, exports over the Maritime Link, imports over the Maritime Link,
33 deliveries of Muskrat Falls energy to the island system net of exports over
34 the Maritime Link, total island interconnected load and Holyrood
35 generation.

36
37 CA-NLH-010 (Reference Application) With respect to alternatives considered in the
38 Application:

- 39 a) What criteria has Hydro used to determine if an alternative is relevant? Are
40 environmental impacts one such criterion?
41 b) How has Hydro incorporated future trends in its assessments? Specifically,
42 has Hydro considered sensitivity studies relating to shorter asset lifespans
43 in the event that new environmentally sensitive options become available
44 in, for example, the next 10 years?

- 1 c) Which renewable energy forms are viable in NL? Specifically, are rooftop
2 solar and wind, battery storage, green renewable fuels, etc. viable
3 alternatives in NL?
4 d) Do thermal generation alternatives burning fossil fuels remain viable under
5 government net-zero emissions efforts?
6

7 CA-NLH-011

(Reference Application) How did Hydro address the risk of an asset becoming
8 stranded owing to new technology, new environmental regulations such as net-
9 zero emissions policies, distributed generation, rate design, etc, or owing to a
10 significant rate increase resulting from Muskrat Falls beyond 2030?
11

12 CA-NLH-012

(Reference Application) According to the Shenandoah Valley Electric
13 Cooperative

14 (<https://oec.myenergysites.com/news/ShenandoahValleyElectric/energy->

15 [storage-can-electrify-your-bottom-](https://oec.myenergysites.com/news/ShenandoahValleyElectric/energy-storage-can-electrify-your-bottom-)

16 [line?newsletterCampaignSendId=45136&subscriberId=f043515d-6ce0-4f8e-aa88-2748acc61f1f&spaceId=v92ovjhflwly](https://oec.myenergysites.com/news/ShenandoahValleyElectric/energy-storage-can-electrify-your-bottom-line?newsletterCampaignSendId=45136&subscriberId=f043515d-6ce0-4f8e-aa88-2748acc61f1f&spaceId=v92ovjhflwly)), battery energy storage “*offers*
17 *a cleaner and more eco-friendly storage solution. There's no need to run a*
18 *generator that emits dangerous gases and requires regular maintenance.*” It
19 goes on to say “*You can have the batteries connected to solar or wind sources*
20 *on-site to generate your own power, lowering the cost of electricity and your*
21 *carbon footprint. If you need to pull power from the grid, you can do that*
22 *during off-peak hours and reduce your energy spend.*”
23

- 24 a) Given the remote nature of many of Hydro’s customers, is battery energy
25 storage combined with time-of-use rates a valid alternative to meeting load
26 growth and satisfying minimum reliability requirements?
27 b) How is battery storage in the form of an electric vehicle impacting Hydro’s
28 approach to reliability?
29 c) Is the government, or Hydro, currently offering programs promoting
30 battery storage, customer-owned generation, smart meters or time-of-use
31 rates?
32 d) What are the benefits of smart meters?
33 e) What are the unit costs of installation of smart meters and how does it
34 compare to the unit costs of installing AMR?
35 f) Would smart meters reduce the cost and duration of outages, particularly
36 in the case of remote customers?
37 g) What are the advantages/disadvantages and challenges associated with
38 implementation of a smart metering program for Hydro’s rural customers?
39 h) Has Hydro undertaken a study quantifying all costs and benefits of smart
40 meters? If so, please file a copy of the report for the record.
41 i) Please provide copies of all studies Hydro has undertaken or reviewed in
42 relation to smart meters.

- 1 CA-NLH-013 (Reference Application) Regarding the Energy and Capacity Agreement
 2 between Nalcor and Emera:
 3 a) When did delivery of the Nova Scotia block and supplemental energy
 4 begin?
 5 b) Have the agreed annual amounts been delivered on schedule or is there an
 6 accumulated amount of undelivered energy or capacity that must be
 7 delivered in the future? Please provide a table showing the scheduled
 8 amounts, the amounts delivered and outstanding amounts.
 9
- 10 CA-NLH-014 (Reference Application) Regarding the Energy Access Agreement with Emera
 11 and Nova Scotia Power, when will be the first year for bidding into the Nova
 12 Scotia system? Is the obligation to deliver energy under the agreement
 13 contingent on the LIL being fully operational at all times?
 14
- 15 CA-NLH-015 (Reference Application) Does the 2025 Capital Budget Application include
 16 any costs for electrification?
 17
- 18 CA-NLH-016 (Reference Application) Now that the rate mitigation plan has been
 19 announced, when does Hydro expect to file its next General Rate Application?
 20
- 21 CA-NLH-017 (Reference Application) Does Hydro have the ability to develop typical load
 22 profiles for its customers that might be used, for example, to manage EV
 23 charger demand, high efficiency heat pump demand, etc?
 24
- 25 CA-NLH-018 (Reference Application) Excluding isolated systems, please provide a table
 26 showing for the past 15 years Hydro's total revenue requirement broken down
 27 by generation, transmission and distribution. Please provide this information
 28 for the Island and Labrador Interconnected Systems separately and combined.
 29
- 30 CA-NLH-019 (Reference Application) With respect to Hydro's distribution business,
 31 excluding isolated systems:
 32 a) What metrics and policies guide Hydro's distribution business? For
 33 example, in terms of reliability, does Hydro strive to: i) mirror the
 34 Canadian average, ii) exceed the Canadian average, iii) fall short of the
 35 Canadian average by a specific percentage, etc?
 36 b) Should Hydro strive for reliability metrics that outperform the CEA? Why
 37 or why not?
 38 c) Do Hydro policies and metrics relating to distribution reliability take into
 39 consideration the impact on customers and customer willingness to pay?
 40
- 41 CA-NLH-020 (Reference Application) Has Hydro embedded productivity savings as a
 42 bottom-line adjustment in its 2025 Capital Budget Application?

- 1 CA-NLH-021 (Reference Application) The Midgard report titled Capital Budget Application
 2 Guideline Review filed with the Board on October 29, 2020 states (page 61):
 3
 4 *“declaring that a project went to competitive tender as evidentiary*
 5 *justification for meeting least cost reliable services does not address key*
 6 *Board questions such as “At what unit cost are system reliability and risk*
 7 *profile improved by the project”, “Does the ratepayer value the improvement*
 8 *in system reliability and risk reduction more than the project cost?, and “How*
 9 *cost effective are the proposed improvements in system reliability and risk*
 10 *reduction compared to other budget items being proposed and other*
 11 *alternatives that are available?”*
 12
 13 Has Hydro provided answers to these questions in the 2025 CBA? If so, please
 14 provide all references.
 15
- 16 CA-NLH-022 (Reference Application, 2025 Capital Budget Overview, Executive Summary,
 17 page ii) It is stated *“Beyond 2030, the Government has publicly stated that it*
 18 *is committed to rate mitigation.”* What plans does Hydro have in place to
 19 continue rate mitigation beyond 2030?
 20
- 21 CA-NLH-023 (Reference Application, 2025 Capital Budget Overview, pages 1 and 2) It is
 22 stated *“Hydro conducted a digital engagement process where it asked*
 23 *customers to share their thoughts on the costs and reliability of the province’s*
 24 *electrical grid. As part of that process, four out of five customers told Hydro*
 25 *they believed the system was reliable and 87% said they did not want to pay*
 26 *more for reliability improvements that led to fewer or shorter outages.*
 27 *Customers largely prioritize the lowest impact on electricity rates rather than*
 28 *other factors, and Hydro is mindful of this concern as it continues asset*
 29 *management planning.”*
 30 a) What role did Newfoundland Power play in the digital engagement
 31 process?
 32 b) Does Hydro believe that the results of the digital engagement process
 33 properly reflect the “thoughts” of Newfoundland Power’s customers
 34 relating to reliability and cost? Why or why not?
 35 c) Does Hydro believe that the digital engagement process applies to all
 36 elements of the provision of electricity service including production,
 37 transmission and distribution?
 38 d) Has Hydro engaged stakeholders and customers to inform its 2025 capital
 39 budget?
 40
- 41 CA-NLH-024 (Reference Application, 2025 Capital Budget Overview, page 3) Table 1
 42 includes a fully-contributed cost of \$0.2 million for Construction and
 43 Installation of Ultra-Fast Electric Vehicle Charging Stations.

- 1 a) Does this expenditure correspond to the \$231.3 thousand expenditure
 2 given in Appendix A, page A-2?
 3 b) Will it be included in rate base, and if so, to which customers will it be
 4 assigned, and why?
 5

6 CA-NLH-025 (Reference Application, 2025 Capital Budget Overview, page 5) Footnote 17
 7 states “*As Hydro has previously stated, full compliance will take years to*
 8 *achieve. Hydro has made and will continue to advance amendments to its CBA*
 9 *process to satisfy the Guidelines.*”

- 10 a) What changes has Hydro made in the 2025 CBA to comply with the
 11 Provisional Guidelines?
 12 b) What changes has Hydro made in its CBAs since the Provisional
 13 Guidelines were issued in December 2021?
 14

15 CA-NLH-026 (Reference Application, 2025 Capital Budget Overview, pages 6 and 7) Hydro
 16 describes its efforts to improve asset management and transparency.

- 17 a) Is Hydro undertaking this effort on its own, or with the help of consultants?
 18 b) Is there a specific implementation plan and schedule associated with this
 19 effort?
 20 c) Is this effort driven by the requirements set out in the Provisional Capital
 21 Budget Application Guidelines?
 22

23 CA-NLH-027 (Reference Application, 2025 Capital Budget Overview, page 8) Figure 2
 24 indicates that Hydro balances system reliability, environmental responsibility
 25 and customer cost.

- 26 a) Is “balancing” reliability, the environment and cost a requirement under
 27 current legislation, or are the province’s utilities only required to provide
 28 service at lowest possible cost?
 29 b) Does “balancing” reliability, the environment and cost mean that Hydro
 30 must not only meet legislated environmental requirements, but go beyond
 31 legislated environmental requirements? If Hydro believes it must go
 32 beyond legislated environmental requirements, how does it determine how
 33 far to go beyond legislated requirements, and the cost that provides the
 34 proper balance?
 35

36 CA-NLH-028 (Reference Application, 2025 Capital Budget Overview, page 24) Can the
 37 proposed 2025 expenditures on the extension of the Stephenville GT be
 38 deferred to 2026 to allow the Board and parties to scrutinize Hydro’s 2024
 39 Resource Plan?
 40

41 CA-NLH-029 (Reference Application, 2025 Capital Budget Overview, page 26) It is stated
 42 “*Therefore, Hydro’s expected estimated accuracy range is approximately*
 43 *+30%/- 40%.*” Is this accuracy range typical for the industry?
 44

- 1 CA-NLH-030 (Reference Application, 2025 Capital Budget Overview, page 34) It is stated
2 “... and the continuation of the previously approved project to replace
3 Hydro’s metering system.” Please provide a description of this project.
4
- 5 CA-NLH-031 (Reference Application, 2025 Capital Budget Overview, page 37) It is stated
6 “As a result of the finalization of the Government’s rate mitigation plan,
7 announced on May 16, 2024, rate increases at the wholesale level on the
8 Island Interconnected System will be limited to target domestic rate increases
9 of 2.25% annually, attributable to Hydro’s costs, up to and including 2030,
10 regardless of the increase in revenue requirement.”
11 a) Does the rate mitigation cap relate to all Hydro costs including capital-
12 related, operation and maintenance, fuel, deferral accounts, and the rural
13 deficit?
14 b) How are the costs of non-regulated assets treated under the rate mitigation
15 cap?
16 c) How does the rate mitigation plan influence rates for Labrador customers,
17 and Island rural and isolated customers?
18 d) How does the rate mitigation plan influence rates for Island Industrial
19 Customers?
20 e) Does the rate mitigation plan impact recovery of specifically-assigned
21 costs, or do these costs fall outside the cap?
22 f) Is it conceivable that annual wholesale rate increases will come in under
23 the 2.25% cap?
24 g) Is the rate mitigation plan effectively an annual revenue cap on “*all*” Hydro
25 costs to provide service to its customers through to, and including, 2030?
26 h) Does the rate mitigation plan effectively transfer regulation of Hydro’s
27 costs to its owner and away from the Public Utilities Board?
28
- 29 CA-NLH-032 (Reference Application 2025 Capital Budget Overview, page 37, Table 10).
30 Does the 0.6% increase in the IIS 2025 wholesale rate result in a 2.25%
31 increase in the IIS domestic rate for that year and does the 2.5% increase in
32 the IIS 2026 wholesale rate result in a 2.25% increase in the IIS domestic rate
33 for that year? Please reconcile.
34
- 35 CA-NLH-033 (Reference Application) Please provide a summary of all laboratory testing
36 conducted by Hydro in the 2025 Capital Budget Application to verify the need
37 for asset replacement.
38
- 39 CA-NLH-034 (Reference Application) Please provide Hydro’s number of customers and
40 energy demand by customer class for 2021, 2022 and 2023, and the forecasts
41 for each of 2024 and the next 5 years, in total and by service area.

1	CA-NLH-035	(Reference Application) Please provide a table identifying the following the
2		Island Industrial Customer class: number of customers, peak demand and
3		annual energy consumption for each of the past 5 years.
4		
5	CA-NLH-036	(Reference Application) Please provide for the record a copy of Hydro's
6		distribution planning guide explaining its planning approach, how integrated
7		resource planning is incorporated including distributed generation and
8		renewable forms of generation, and how reductions in harmful environmental
9		emissions and government zero-carbon initiatives are taken into account.
10		
11	CA-NLH-037	(Reference Application) Please provide for the record a copy of Hydro's
12		connection policy, for both new and existing customers, and for each customer
13		class.
14		
15	CA-NLH-038	(Reference Application) How do residential rates for customers on the Island
16		Interconnected system (e.g., St. John's) compare to other major cities in
17		Canada? Is there relevance in comparing rates to all other Canadian provinces,
18		or should NL rates be compared only to those provinces where hydropower
19		provides the bulk of electricity to customers, namely, BC, Manitoba and
20		Quebec? If such a comparison is made, where would residential rates in NL
21		stand?
22		
23	CA-NLH-039	(Reference Application) With respect to the prioritization process used in the
24		2025 Capital Budget Application:
25		
26		a) Which entity within Hydro is responsible for developing project
27		prioritization and consistency of application across the broad range of
28		projects included in the Application?
29		b) How does Hydro senior management communicate to line managers which
30		capital projects were to be included in the 2025 CBA, and which capital
31		projects were to be included in Hydro's planned 2025 to 2029 capital
32		expenditures?
33		
34	CA-NLH-040	(Reference Application, 2023 Capital Budget Overview, page 5) In the 2023
35		CBA, Hydro stated with respect to the Asset Management Needs and
36		Readiness Assessment: " <i>This assessment has recently concluded. Hydro offers</i>
37		<i>to provide this report once internal stakeholder engagement is complete.</i> "
38		Please provide a status update and file a copy of this report for the record.
39		
40	CA-NLH-041	(Reference Application, Five-Year Capital Plan (2025-2029), page 1) It is
41		stated " <i>Hydro's 2025–2029 Five-Year Capital Plan reflects the capital</i>
42		<i>investments necessary to maintain infrastructure and provide safe, reliable,</i>
43		<i>least-cost electricity for customers, while aiming to balance cost, reliability,</i>
44		<i>and environmental impacts.</i> " Did Hydro consider alternatives to its capital

1 spending that would reduce load (e.g., seasonal pricing, customer self-
2 generation)?

3
4 CA-NLH-042 (Reference Application, Five-Year Capital Plan (2025-2029), page 1)
5 Regarding the addition of 400 MW of wind energy,
6 a) What is the estimated capital cost of this 400 MW of wind energy?
7 b) Will Hydro develop this wind energy or would it procure it from other
8 sources?
9 c) Does Hydro currently own and operate wind energy generation capacity?
10 d) Does Hydro's legislative mandate allow it to construct and operate its own
11 wind energy facilities?
12 e) Does legislation allow others to construct and operate wind energy
13 facilities?
14 f) Please provide evidence comparing the cost-effectiveness of procuring
15 wind-generated electricity through PPAs with private wind energy generating
16 companies to in-house generation.

17
18 CA-NLH-043 (Reference Application, Five-Year Capital Plan (2025-2029), page 3) It is
19 stated "*in support of Hydro's expansion plans, Hydro is exploring the viability*
20 *of technical options including special protection schemes and dynamic line*
21 *rating, which would help minimize the transmission investment required.*"
22 a) Please explain "dynamic line rating".
23 b) Is this considered a "smart grid application"?
24 c) Is AMI, or smart metering, a smart grid application?
25

26 CA-NLH-044 (Reference Application, Five-Year Capital Plan (2025-2029), page 4) Is
27 Holyrood TGS life extension a potential supply option beyond 2030? Would
28 operation of Holyrood TGS beyond 2030 be consistent with government zero-
29 carbon initiatives?
30

31 CA-NLH-045 (Reference Application, Five-Year Capital Plan (2025-2029), page 5) With
32 respect to Planned System Growth Capital Expenditures:
33 a) Are these expenditures required both to increase energy and to add capacity?
34 b) How much excess electricity did Hydro sell in external markets in 2022 and
35 in 2023 and what were the sources of that excess energy?
36 c) Without additions to generating facilities, how long will excess electricity
37 persist?
38 d) Once existing excess electricity is fully taken up, what will be the marginal
39 cost of electricity for the IIS?
40 e) To what extent can Hydro import energy and capacity for the IIS from
41 outside the province over next five years?
42

43 CA-NLH-046 (Reference Application, Five-Year Capital Plan (2025-2029), page 11) It is
44 stated "*Modifications to terminal stations to improve oil and fire containment*

1 *and to accommodate the interconnection of mobile substations when*
 2 *required.” Is oil and fire containment at terminal stations a legal requirement?*
 3

4 CA-NLH-047 (Reference Application, Schedule 3 - Holyrood Thermal Generating Station
 5 Overview) Is Holyrood expected to be fully available for the winter of
 6 2024/25?
 7

8 CA-NLH-048 (Reference Application, Schedule 3 – Holyrood Thermal Generating Station
 9 Overview)

10 a) Please provide a table showing generation and peak production at
 11 Holyrood for the months from July 2020 to July 2024 inclusive.

12 b) If either Unit 1 or Unit 2 at Holyrood permanently failed then explain the
 13 extent to which Holyrood would have been able to produce similar
 14 amounts of monthly energy over this time period.

15
 16 CA-NLH-049 (Reference Application, Schedule 3, Holyrood Thermal Generating Station
 17 Overview, page 12) What was the DAUFOP for Holyrood TGS in each of the
 18 past 5 years? Please show separately for each unit at Holyrood TGS.
 19

20 CA-NLH-050 (Reference Application, Schedule 3, Holyrood Thermal Generating Station
 21 Overview, page 12) It is stated “*An alternate source of heat is required to*
 22 *prevent freeze-up of the plant and consequential severe damage to critical*
 23 *generation equipment should all three boilers at Holyrood TGS be unavailable*
 24 *for operation simultaneously during cold weather.”*

25 a) In the past, what has been the heating source at Holyrood and why is it no
 26 longer available?

27 b) Have all three boilers ever been unavailable for operation simultaneously
 28 during cold weather? If so, what was the extent of damage to critical
 29 generation equipment?

30 c) Is there reason to believe that the likelihood of such an event will be greater
 31 from 2026 to 2030 than in the past?

32 d) Please provide an estimated probability of such an event occurring during
 33 2026 to 2030?

34 e) Please confirm that the proposed cost of the heating system is \$901,300 in
 35 2026 and \$9,594,000 in 2027 as given in Appendix B, page B-1.
 36

37 CA-NLH-051 (Reference Application, Schedule 3, Holyrood Thermal Generating Station
 38 Overview, page 12) It is stated “*Staffing levels at Holyrood TGS will remain*
 39 *consistent with the current operation.”*

40 a) How many Hydro employees work at the Holyrood generating station?

41 b) What was their average base salary and average total compensation in
 42 2022 and 2023?

- 1 CA-NLH-052 (Reference Application, Schedule 3, Holyrood Thermal Generating Station
2 Overview) Is battery storage a viable alternative to operating Holyrood in
3 standby mode? What is the current status of utility-scale battery systems in
4 terms of technical viability, availability and cost?
5
- 6 CA-NLH-053 (Reference Application, Schedule 3, Holyrood Thermal Generating Station
7 Overview) In the 2024 CBA, it was stated (Schedule 3 relating to Holyrood
8 TGS, page 11) “*There will be one Holyrood TGS unit online in mid-October
9 through November; two Holyrood TGS units online from December to
10 February; and one unit online in March.*” Has this operating pattern changed?
11
- 12 CA-NLH-054 (Reference Application, 2024 Capital Expenditures Overview, page 7) It is
13 stated “*The software vendor advised Hydro that it is unable to support this
14 work in 2024. Hydro’s attempts to escalate with the vendor did not lead to
15 change.*” Has the software vendor assured Hydro that it can support the work
16 in 2025? If not, what alternatives are available to Hydro?
17
- 18 CA-NLH-055 (Reference Application, 2024 Capital Expenditures Overview) A number of
19 projects were over-budget due to higher-than-expected contract pricing. Does
20 Hydro believe this to be an anomaly? How has this influenced Hydro’s pricing
21 of projects and programs in the 2025 CBA?
22
- 23 CA-NLH-056 (Reference Application, 2024 Capital Expenditures Overview) It appears that
24 a number of projects relating to Holyrood TGS came in over budget. Is this an
25 anomaly, or is it a reflection of the condition of the generating station being
26 worse than anticipated? Has Hydro made adjustments in the 2025 CBA to
27 reflect the possibility that the condition of Holyrood TGS may be worse than
28 anticipated?
29
- 30 CA-NLH-057 (Reference Application, 2024 Capital Expenditures Overview, page 9) It is
31 stated “*The forecasted variance in the overall project expenditures is
32 attributed to construction contract pricing that is higher than the original
33 budget estimate.*” Is higher than anticipated contract pricing the sole reason
34 for the cost increase of 80%?
35
- 36 CA-NLH-058 (Reference Application, 2024 Capital Expenditures Overview, page 10) It is
37 stated “*Hydro reviewed the cost-benefit analysis of alternatives and confirmed
38 that the solution being implemented remains the least cost alternative. Hydro
39 is proceeding with execution.*” Please provide the cost-benefit analysis and
40 confirm that smart meters were one of the alternatives considered.
41
- 42 CA-NLH-059 (Reference Application, 2024 Capital Expenditures Overview, page 11) It is
43 stated “*The change will not impact the reliability of service, as the rental
44 transformer installed on-site will remain until the new transformer is installed*”

1 *and placed in service.*” Who provided the “rental transformer” and has
 2 purchase of the rental transformer been considered?
 3

4 CA-NLH-060

(Reference Application, Carryover Report, page B-53) It is stated “*In 2023, Hydro carried over \$21.9 million of budget to future years.*” This compares to the average carryover amount for the previous nine years (2014–2022) of \$28.2 million.

- 5
 6
 7
 8 a) Does Hydro consider this to be an acceptable amount of carryover?
 9 b) What actions are being taken by Hydro to eliminate, or reduce to a
 10 negligible amount, the carryover?
 11 c) When does Hydro expect to eliminate, or reduce to a negligible amount, its
 12 carryover into future years?
 13

14 CA-NLH-061

(Reference Application, 2024 Capital Expenditures Overview) Has Hydro experienced a significant increase in transformer costs? Please provide a table showing average unit transformer costs in each of the past 5 years, and forecast for each of the next 5 years.
 15
 16
 17
 18

19 CA-NLH-062

(Reference Application, 2024 Capital Expenditures Overview, page 15) Please provide details of the \$5.7 million cost estimate for the new building at Bishop’s Falls.
 20
 21
 22

23 CA-NLH-063

(Reference Application, Replace Light- and Heavy-Duty Vehicles (2025-2027))
 24

- 25 a) How many vehicles will be replaced with electric vehicles (EVs)?
 26 b) How many EVs does Hydro currently own?
 27 c) What are the prospects for electric heavy-duty vehicles?
 28 d) How do the lifetime costs of Hydro-owned EVs compare to Hydro-owned
 29 gasoline/diesel powered vehicles?
 30 e) What is the current lead time for purchasing gasoline/diesel light-duty
 31 vehicles relative to purchasing comparable EVs?
 32 f) What is the current capital cost of a gasoline/diesel light-duty vehicle and
 33 a comparable EV?
 34 g) How do current supply chain issues and high levels of inflation impact the
 35 purchase of light duty electric vehicles relative to gasoline/diesel vehicles?
 36 h) It is stated (page 5) “*Substantial cost escalation has been experienced in
 37 both the light- and heavy-duty segments since 2020.*” Does this suggest that
 38 historical costs are not a particularly good measure of costs going forward?
 39 What cost escalation does Hydro expect going forward?
 40

41 CA-NLH-064

(Reference Application) With respect to Isolated Systems, please provide an update on all studies being undertaken to connect Isolated Communities to the grid, or alternatively, replace diesel gensets with more environmentally-friendly alternatives.
 42
 43
 44

- 1 CA-NLH-065 (Reference Application) With respect to wood pole line management:
2 a) What are Hydro’s policies and practices regarding reduction of the
3 environmental footprint relating to wood pole disposal?
4 b) What preservatives has Hydro used to extend the life of wood poles?
5 c) What is the unit cost to purchase wood poles?
6 d) What is the unit cost to dispose of wood poles?
7 e) Please provide a table showing the total and per unit costs of wood pole
8 purchases in each of the last ten years.
9
- 10 CA-NLH-066 (Reference Application) In the 2024 CBA Hydro proposed to purchase
11 “accommodations trailers”. The project was later abandoned. What is Hydro
12 doing now with respect to accommodations for staff undertaking work in these
13 locations?
14
- 15 CA-NLH-067 (Reference Application) What changes have been made in the 2025 CBA in
16 response to Hydro’s capital budget performance in 2023?
17
- 18 CA-NLH-068 (Reference Application, Upgrade Worst-Performing Distribution Feeders
19 (2025-2027))
20 a) Have customers served by EHW-L1 expressed increasing levels of
21 dissatisfaction with reliability performance?
22 b) The evaluation of alternatives (page17) identifies “Construct New Feeder”
23 as an alternative, but does not identify the cost. What would be the
24 approximate cost to construct a new feeder?
25 c) Is “reconstruction of 23 kilometres of the three-phase section of EHW-L1”
26 (page 18) the same as constructing 23 km of new feeder?
27
- 28 CA-NLH-069 (Reference Application, Distribution System In-Service Failures,
29 Miscellaneous Upgrades and Street Lights (2025), page i) It is stated “*The*
30 *estimated cost for work executed under this program in 2025 is \$6,397,000,*
31 *which is based on the average expenditures over the past three years, from*
32 *2021 to 2023, and includes an addition of \$1,042,442 for the purchase of a*
33 *new capital spare substation power transformer.”*
34 a) In light of increased levels of inflation and extended lead times for
35 procurement, is use of average historical expenditures in recent years
36 without adjustment reasonable?
37 b) Is it reasonable to purchase a spare power transformer at this time given
38 the very high cost increases?
39
- 40 CA-NLH-070 (Reference Application, Replace Diesel Gensets (2025-2027))
41 a) Is there a risk of asset stranding owing to government zero-carbon
42 initiatives?
43 b) Is there potential for switching the diesel gensets to renewable green fuels?
44 c) Did Hydro consider zero-carbon alternatives to diesel genset replacement?

- 1 CA-NLH-071 (Reference Application, Replace Mobile Equipment (2025-2027)) Is any of
2 this equipment driven by zero-carbon fuels? Are renewable green fuel
3 alternatives available to power this equipment?
4
- 5 CA-NLH-072 (Reference Application, Perform Software Upgrades and Minor
6 Enhancements (2025)) It is stated (page 1) *“This program involves upgrading
7 and enhancing software systems and applications used by the Newfoundland
8 and Labrador Hydro (“Hydro”) Operational Technology (“OT”) group to
9 maintain the Energy Management System (“EMS”), as well as applications
10 that support processes in specific business areas such as Resource and
11 Production Planning, the Newfoundland and Labrador System Operator, and
12 Transmission and Rural Operations.”* How much of these costs, and for that
13 matter all costs in the 2025 CBA, are applicable to transmission service and
14 recovered in the Open Access Transmission Tariff?
15
- 16 CA-NLH-073 (Reference Application, Upgrade Work Protection Code (2025–2026)) Is the
17 cost of this project allocated to the NLSO and recovered in the Open Access
18 Transmission Tariff?
19
- 20 CA-NLH-074 (Reference Application) Please provide a table listing all program/projects for
21 which proposed 2025 expenditures are based on historical averages and giving
22 the proposed expenditure for each.
23
- 24 CA-NLH-075 (Reference Application) What is the all-in average rate for all end-use
25 customers on the Island Interconnected System? What is the current rate for
26 residential customers on the Island Interconnected System, both all-in and
27 energy charge only?
28
- 29 CA-NLH-076 (Reference Application) Please provide a detailed calculation of the cost to
30 own and operate Hydro’s small hydro facilities (with capacity less than 1
31 MW), and the amount of money recovered annually from customers
32 attributable to Hydro’s small hydro generation facilities.
33
- 34 CA-NLH-077 (Reference Application) What is the current status of Hydro’s studies on
35 retirement of its small hydro generating facilities? Please file any studies
36 Hydro has completed on its small hydro generation facilities, specifically,
37 those with capacities that are less than 1 MW. Are these facilities expected to
38 remain used and useful?
39
- 40 CA-NLH-078 (Reference Application) Please provide details of Hydro’s approach to
41 assessing the relative cost of non-wires alternatives (NWAs) and distributed
42 energy resources (DERs) to the capital investment in traditional assets that are
43 included in Hydro’s capital plan, including any reports or analyses that show
44 the comparative analysis for the projects included in the 2025 Capital Budget

1 Application. If NWAs have not been considered, please explain why they have
2 been excluded as options without a comparison of alternatives.

3
4 CA-NLH-079 (Reference Application) What is Hydro's current estimate of the marginal
5 value of capacity and energy over the next five years? Please provide a
6 comparison to actual sales of capacity and energy with transmission/wheeling
7 costs shown separately for 2020, 2021, 2022, 2023 and year-to-date 2024.

8
9 CA-NLH-080 (Reference 2024 CBA, Capital Expenditures and Carryover Report, page 37)
10 It is stated "*The purchase of light-duty vehicles includes two fully electric*
11 *vehicles, which were received in 2022.*" Is the performance of these EVs
12 meeting expectations? What was the cost relative to internal combustion
13 vehicles?

14
15 CA-NLH-081 (Reference Application) In the Capital Budget, who is responsible for the
16 evidence to testify at a technical conference or in an oral public hearing? What
17 lead individuals are responsible for testifying for each capital budget
18 expenditure?

19
20 CA-NLH-082 (Reference Application) In the Capital Budget proposals, what independent
21 verification is there to support the proposal?


22
23 CA-NLH-083 (Reference Application) In reference to the allowance for "unforeseen items",
24 please provide a history of this allowance from 2000 to the present, and where
25 and when the allowance was called upon, and for what reasons, and what was
26 left in the allowance for unforeseen items at the end of each particular year.

27
28 CA-NLH-084 (Reference Application) Has the war in the Ukraine impacted the projects and
29 programs in the 2025 CBA?

30
31 CA-NLH-085 (Reference Application) Please provide a projection of Hydro's capital
32 structure, in dollar and percentage terms, in 2030 based on the Five-year
33 Capital Plan, and compare to Hydro's current capital structure.

DATED at St. John's, Newfoundland and Labrador, this 29th day of August, 2024.

Per:


Dennis Browne, KC - Consumer Advocate

Terrace on the Square, Level 2, P.O. Box 23135

St. John's, Newfoundland & Labrador A1B 4J9

Telephone: (709) 724-3800

Telecopier: (709) 754-3800

Email: dbrowne@bfma-law.com