

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

July 15, 2021

Board of Commissions of Public Utilities
120 Torbay Road, P.O. Box 2140
St. John's, NL A1A 5B2

**Attention: G. Cheryl Blundon, Director of
Corporate Services / Board Secretary**

Dear Ms. Blundon:

**Re: Newfoundland and Labrador Hydro – Approvals Required to
Execute Programming Identified in the Electrification,
Conservation and Demand Management Plan 2021-2015**

Further to the above-captioned, enclosed are the Consumer Advocate's Requests for Information numbered CA-NLH-001 to CA-NLH-036.

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

Yours truly,



Dennis Browne, Q.C.
Consumer Advocate

Encl.
/bb

cc **Newfoundland and Labrador Hydro**
NLH Regulatory (NLHRegulatory@nlh.nl.ca)
Shirley Walsh (shirleywalsh@nlh.nl.ca)
Newfoundland Power Inc.
NP Regulatory (regulatory@newfoundlandpower.com)
Dominic Power (dpower@newfoundlandpower.com)
Lindsay Hollett (lhollett@newfoundlandpower.com)
Industrial Customer Group
Paul Coxworthy (pcoxworthy@stewartmckelvey.com)
Dean Porter (dporter@poolealthouse.ca)
Denis Fleming (dfleming@coxandpalmer.com)
Board of Commissioners of Public Utilities
Jacqui Glynn (jglynn@pub.nl.ca)
Maureen Greene (mgreene@pub.nl.ca)
PUB Official Email (ito@pub.nl.ca)

Iron Ore Company of Canada
Greg Moores (gmoores@stewartmckelvey.com)
Labrador Interconnected Group
Senwung Luk (sluk@oktlaw.com)
Julia Brown (jbrown@oktlaw.com)
Teck Resources Limited
Shawn Kinsella (shawn.kinsella@tech.com)
Praxair Canada Inc.
Sheryl Nisenbaum (sheryl_nisenbaum@praxair.com)
Peter Strong (peter_strong@linde.com)

IN THE MATTER OF the *Electrical Power Control Act*, R.S.N.L. 1994, Chapter E-5.1 (“*EPCA*”) and the *Public Utilities Act*, R.S.N.L. 1990, Chapter P-47 (the “*Act*”); and regulations thereunder;

AND

IN THE MATTER OF an Application (the “*Application*”) by Newfoundland and Labrador Hydro (“*Hydro*”) pursuant to to Sections 58, 71 and 80 of the Act, for the approval of an economic test and a deferral of Electrification, Conservation and Demand Management (“*ECDM*”) program costs in the proposed ECDM Cost Recovery Adjustment;

AND

IN THE MATTER OF an application by Hydro, pursuant to Section 41(3) of the Act, for the approval of supplemental 2021 capital expenditures related to the construction of an electric vehicle (“*EV*”) charging network.

**CONSUMER ADVOCATE
REQUESTS FOR INFORMATION
CA-NLH-001 to CA-NLH-036**

Issued: July 15, 2021

- 1 CA-NLH-001 (Reference Application)
- 2 a) Why was a technical conference not held on the Hydro and
- 3 Newfoundland Power electrification partnership program before filing
- 4 the respective electrification Applications?
- 5 b) Are there plans for Hydro and Newfoundland Power to hold a technical
- 6 conference on the electrification program?
- 7
- 8 CA-NLH-002 (Reference Application, para. 19) Please confirm, or correct, as necessary,
- 9 that Hydro proposes the following:
- 10 a) CDM costs for Island customers will be recovered in the ECDM
- 11 Deferral Account. No capital costs relating to CDM for Island
- 12 customers, are currently, or will in the future, be included in rate base.
- 13 b) CDM costs for Labrador customers will be recovered in the ECDM
- 14 Deferral Account. No capital costs relating to CDM for Labrador
- 15 customers are currently, or will in the future, be included in rate base.
- 16 c) Electrification costs, ignoring capital for charging stations, for Island
- 17 customers will be recovered in the ECDM deferral account.
- 18 d) Electrification costs, ignoring capital for charging stations, for Labrador
- 19 customers will be recovered in the ECDM deferral account.
- 20 e) Capital costs for charging stations on the Island, less Government
- 21 funding, will be recovered in the ECDM Deferral Account and will not
- 22 be included in rate base.
- 23 f) Capital costs for charging stations in Labrador, less Government
- 24 funding, will not at this time be recovered from customers, and will not
- 25 be included in rate base, but may be recovered from customers in the
- 26 future in the ECDM deferral account if it is determined that they are
- 27 beneficial to customers and are consistent with the provision of least
- 28 cost reliable service.
- 29
- 30 CA-NLH-003 (Reference Application, para. 19) It is stated “*An additional approximately*
- 31 *\$0.1 million will be provided by Nalcor Energy for the planned charger*
- 32 *location in Churchill Falls.*”
- 33 a) Is Nalcor Energy being incorporated as part of Hydro, and if so, will the
- 34 \$0.1 million ultimately be recovered from customers?
- 35
- 36 CA-NLH-004 (Reference Application, para. 19) Provide a comparison of proposals made
- 37 by Hydro and its ECDM partner, Newfoundland Power, for the following:
- 38 a) CDM cost recovery for Island customers identifying those costs to be
- 39 recovered in a deferral account and those to be included in rate base.
- 40 b) Electrification cost recovery for Island customers identifying those costs
- 41 to be recovered in a deferral account and those to be included in rate
- 42 base.

- 1 CA-NLH-005 (Reference Application, para. 19) It is stated “*This application seeks*
 2 *approval to charge the capital cost of the fast charging stations on the*
 3 *Island Interconnected System, net of the government contributions, to the*
 4 *ECDM Cost Deferral Account but to not include the capital costs in rate*
 5 *base.*”
- 6 a) Will the ECDM Cost Deferral Account be included in regulated rate
 7 base?
- 8 b) Are any of Hydro’s deferral accounts included in regulated rate base? If
 9 so, which ones?
- 10 c) Provide the rationale for including a deferral account in regulated rate
 11 base.
- 12 d) What would be the impact on revenue requirement and customer rates
 13 if Hydro were to include capital for charging stations in rate base rather
 14 than in a deferral account as proposed?
- 15
- 16 CA-NLH-006 (Reference Application) Provide a comparison of Newfoundland Power
 17 and Hydro costs to build, own and operate charging stations. Base the
 18 comparison on the assumption that each utility would construct charging
 19 station infrastructure of \$1 million in 2022. Assume no government funding
 20 and include tax impacts in the comparison. Further, show impacts on
 21 revenue requirement and rates based on each utility’s proposed recovery
 22 method for charging station capital costs.
- 23
- 24 CA-NLH-007 (Reference Application) With respect to construction, ownership and
 25 operation of charging station infrastructure:
- 26 a) What benefits are brought to the electrification program by Hydro’s
 27 ECDM partner Newfoundland Power that are over and above those that
 28 Hydro can provide?
- 29 b) What benefits does Hydro bring to the partnership with respect to
 30 construction, ownership and operation of charging station infrastructure
 31 that are over and above those that Newfoundland Power can provide?
- 32 c) In effect, how do customers benefit from this partnership with respect
 33 to construction, ownership and operation of charging station
 34 infrastructure?
- 35
- 36 CA-NLH-008 (Reference Application)
- 37 a) How do customers benefit from this partnership between Hydro and
 38 Newfoundland Power with respect to construction, ownership and
 39 operation of charging station infrastructure over the private sector, if
 40 Government, Hydro or Newfoundland Power provide incentives such as
 41 low interest loans, capital contributions, etc. to promote private sector
 42 participation?
- 43 b) Would this approach be similar to the approach followed for CDM
 44 programs?

- 1 c) Does Hydro construct, own and operate infrastructure for any of its
2 CDM programs?
3 d) If so, please provide details.
4
- 5 CA-NLH-009 (Reference Schedule 2, Executive Summary, page i) It is stated “*This first*
6 *phase of the network consists of 14 sites from St. John’s to Port Aux*
7 *Basques, including one site in Gros Morne National Park.*”
8 a) Now that Hydro has constructed a “base” of charging station
9 infrastructure across the Island, how do customers benefit from the
10 second phase relative to turning the charging station infrastructure
11 program over to the private sector with incentives provided as necessary
12 to promote participation?
13 b) Why not let the private sector take the risk and invest in the next phase
14 of charging stations as the number of EVs rise?
15 c) Please quantify the costs, benefits and risks associated with Hydro and
16 Newfoundland Power construction of charging station infrastructure
17 relative to the private sector with the appropriate incentives.
18
- 19 CA-NLH-010 (Reference Application, para. 19)
20 a) If capital costs for charging stations in Labrador, less Government
21 funding, are not recovered from customers will these costs represent a
22 loss to Hydro?
23 b) Would this represent a cross-subsidy by Island customers paid to
24 Labrador customers?
25
- 26 CA-NLH-011 (Reference Schedule 1 – Evidence, page 2) It is stated “*As the 2021 Plan*
27 *was jointly developed and will be jointly executed by the two utilities, Hydro*
28 *is also seeking approval to use a Modified Total Resource Cost test*
29 *(“mTRC”) for the economic evaluation of customer electrification*
30 *programs.*”
31 a) Please confirm that Newfoundland Power’s ECDM program has not
32 received Board approval.
33 b) What are Hydro’s plans if the Board does not approve Newfoundland
34 Power’s proposed ECDM program, or approves it with modifications
35 causing Newfoundland Power to modify or abandon its proposed
36 ECDM program? For example, if Newfoundland Power abandons its
37 charging station program would Hydro enlist the services of the private
38 sector to fill the void through capital incentives to construct and own
39 charging stations?
40
- 41 CA-NLH-012 (Reference Application) Did Hydro consider undertaking the installation
42 of the proposed EV charging network as a non-regulated service, with the
43 costs recoverable through sources of revenue other than regulated rate base
44 or a deferral account?

- 1 a) If yes, please provide all analyses and reports that have been prepared
 2 by independent consultants or Hydro staff exploring this option.
 3 b) If no, please explain why the option was not considered.
 4
- 5 CA-NLH-013 (Reference Application) Did Hydro consider undertaking the installation
 6 of the proposed EV charging network in partnership with private sector
 7 businesses, such as highway gas stations and other businesses providing
 8 services to travelers?
 9 a) If yes, please provide all analyses and reports that have been prepared
 10 by independent consultants or Hydro staff exploring this option.
 11 b) If no, please explain why the option was not considered.
 12
- 13 CA-NLH-014 (Reference Application) Please provide a detailed description of the
 14 approach to implementing an EV charging network in Newfoundland that
 15 would minimize the subsidy required from customers (through the inclusion
 16 of costs in regulated rate base or a deferral account) or an alternate source
 17 such as the Provincial or Federal government.
 18
- 19 CA-NLH-015 (Reference Application) Please provide a list of all alternate sources of
 20 funding of the EV charging network (including government programs) that
 21 are potentially available to Hydro for this project as well as the actions taken
 22 and the results of actions taken to access alternate sources of funding.
 23
- 24 CA-NLH-016 (Reference Application) Please provide a list of other Canadian integrated
 25 electric utilities and for each one provide: (i) details of its investment in EV
 26 charging stations, if any, and (ii) the sources of funding utilized to recover
 27 the costs of the EV charging stations.
 28
- 29 CA-NLH-017 (Reference Schedule 1 – Evidence, pages 2 and 3) It is stated “*The proposed*
 30 *electrification programs all have results above 2.0.*”
 31 a) Has Hydro considered time-of-use rates for industrial customers and
 32 assessed benefit to cost ratios?
 33 b) Please identify the costs and benefits of a time-of-use rates program for
 34 industrial customers and show how it compares to the benefit to cost
 35 ratios for CDM and electrification programs.
 36
- 37 CA-NLH-018 (Reference Schedule 1 – Evidence, page 4) It is stated “*A managed*
 38 *approach reduces the peak demand increase to only 42 MW, which is more*
 39 *than offset by the electrification benefits outlined in the 2021 Plan.*”
 40 a) How will Hydro manage the peak demand increase?
 41 b) Is Hydro’s ECDM partner, Newfoundland Power, proposing a similar
 42 peak demand management plan?
 43 c) What would be the cost to meet the additional 42 MW of peak demand
 44 assuming CDM programs are the same with or without electrification?

- 1 CA-NLH-019 (Reference Schedule 1 – Evidence, page 5) It is stated “*If the proposed*
2 *capital expenditures for electrification infrastructure are not approved, the*
3 *opportunity for rate mitigation benefits from the proposed capital*
4 *investment will be relinquished.*”
5 a) Would there be any difference with respect to rate mitigation impacts if
6 the private sector were provided capital incentives to build, own and
7 operate the charging stations?
8 b) Would this approach reduce the risks to consumers?
9
- 10 CA-NLH-020 (Reference Schedule 1 – Evidence, page 6) It is stated “*Hydro is proposing*
11 *to credit the revenues and charge the operating and maintenance costs*
12 *associated with its first 14 chargers to its CDM deferral account for*
13 *recovery on a prospective basis. Consistent with previous applications,*
14 *Hydro will not seek any capital related recovery associated with these*
15 *chargers. Hydro believes that the findings of the Conservation Potential*
16 *Study and the economic justification of the electrification programs,*
17 *including utility investment in EV charging infrastructure, support this*
18 *approach.*” Further on page 6 Hydro states “*Hydro believes it is*
19 *appropriate for the proposed capital investment associated with the*
20 *additional six chargers on the Island Interconnected System to be recovered*
21 *from customers. Therefore, Hydro is proposing to charge capital costs*
22 *incurred to deliver the plan to the ECDM Cost Deferral Account for future*
23 *recovery from customers.*”
24 a) Provide the rationale for proposing different approaches for capital cost
25 recovery for the first 14 chargers versus the next 6 chargers.
26 b) What is the rationale to recover any of these expenses from Hydro’s and
27 Newfoundland Power’s customers?
28
- 29 CA-NLH-021 (Reference Schedule 1 – Evidence, page 6) It is stated “*Based on Hydro’s*
30 *currently approved CDM Recovery Adjustment definition, recovery of these*
31 *costs will take place over a seven-year period.*”
32 a) Is a 7-year recovery period consistent with Newfoundland Power’s
33 proposal?
34 b) If not, provide the rationale for having different recovery periods for
35 Hydro and Newfoundland Power.
36
- 37 CA-NLH-022 (Reference Schedule 1 – Evidence, page 6) It is stated “*Given EV charging*
38 *has been determined to not be considered a public utility service, Hydro is*
39 *not seeking to include these assets in its rate base as a capital asset.*” It is
40 understood that Hydro and Newfoundland Power jointly developed the
41 Province’s electrification program.
42 a) Has Hydro’s ECDM partner, Newfoundland Power, indicated its
43 agreement with this statement?

1 b) To Hydro's knowledge, is Newfoundland Power planning to re-submit
2 or abandon the component of its application relating to charging
3 stations?
4

5 CA-NLH-023 (Reference Schedule 1 – Evidence, page 7) It is stated “*A 2019 survey*
6 *indicated that approximately 60% of utilities fund EV programs either*
7 *solely through customer rates or through a combination of ratepayer*
8 *recovery and government funding.*” How do the other 40% of utilities fund
9 their EV programs?
10

11 CA-NLH-024 (Reference Schedule 1 – Evidence, pages 8 and 9) It is stated “*Hydro is*
12 *proposing modifications to the CDM Cost Deferral Account definition and*
13 *CDM Cost Recovery Adjustment to permit recovery of Labrador*
14 *Interconnected System costs from those customers, including their portion*
15 *of the Rural Deficit allocation related to CDM investments for Hydro Rural*
16 *customers.*”
17

18 a) Please explain this further, in particular, how will “*their portion of the*
19 *Rural Deficit allocation related to CDM investments for Hydro Rural*
20 *Customers*” be calculated and why it is appropriate?
21

22 b) Please provide an example.

23 CA-NLH-025 (Reference Schedule 1 – Evidence, page 11, July 8, 2021 Revision) It is
24 stated “*Hydro's proposals to enable infrastructure investment and ECDM*
25 *programs are projected to provide more than \$0.7 million in rate mitigation*
26 *benefits to customers on the Island Interconnected System over a 15-year*
27 *period and are consistent with the provision of least-cost, reliable service*
28 *to customers.*”
29

30 a) What level of accuracy does Hydro place on the \$0.7 million in rate
31 mitigation benefits over a 15-year period? Does this equate to less than
32 \$50,000 annually, on average, less than 0.01% of the 2019 test year
33 revenue requirement filed with Hydro's 2017 GRA (\$692.7 million,
34 page 4-3 of Application)?
35

36 b) What rate mitigation impact would the infrastructure investment and
37 ECDM programs have over the next 5 years, and over the next 10 years?
38 Will the program result in any customer rate increase over the next 5
39 years, and over the next 10 years?
40

41 c) In this calculation, what does Hydro assume with respect to customer
42 rates, Muskrat Falls impacts and Government rate mitigation?
43

44 d) How will this impact rates?
45

46 e) The \$0.7 million estimate appears dependent on growing incremental
47 revenues after 2030 (see Appendix A). Is the revenue growth
48 expectation realistic considering that there could be competition from
49 private sector providers by that time?
50

- 1 f) How much risk is Hydro placing on customers to derive what appears
2 to be minimal benefit falling well within the level of accuracy of the
3 estimate?
4
- 5 CA-NLH-026 (Reference Schedule 2, Executive Summary, page i) It is stated "*Under the
6 proposed project, Hydro will expand its charging network to include nine
7 additional sites on the Great Northern Peninsula and Labrador. Each site
8 will include both a Level 3 Direct Current Fast Charger ("DCFC") with a
9 minimum output of 62.5 kW and a Level 2 (7 kW) charger. Final locations
10 will be selected based on a public request for proposals.*"
11 a) Provide a history of charger technology development.
12 b) When does Hydro predict that the Level 3 DCFC technology will be
13 superseded by a more advanced technology, potentially resulting in
14 stranded assets?
15 c) Are Hydro and Newfoundland Power willing to take on this risk on
16 behalf of their customers? Please provide the reference in the
17 Application that discusses the risks of charger station obsolescence, how
18 the risk will be managed and how customers will be held harmless.
19 Further, provide all documentation showing that customers have
20 expressed a willingness to take on this risk.
21
- 22 CA-NLH-027 (Reference Schedule 2, page 1) It is stated "*Hydro is proposing to expand
23 its existing charging network to these areas to allow for greater regional
24 transportation and adoption of EVs in additional areas of the province.*"
25 a) Is there a greater risk of stranded assets under this next phase of the
26 proposed program given that EV travel in these areas is "*much more
27 challenging*" (page 1)?
28 b) How does Hydro propose to mitigate this risk for customers?
29
- 30 CA-NLH-028 (Reference Schedule 2, page 5) It is stated "*The site will be approximately
31 10 metres by 10 metres in size and will be sufficient to locate the two
32 chargers, a power supply cabinet, and two parking stalls.*"
33 a) Will only two customers be able to charge their EVs at a given time?
34 b) Is this the same setup at each charging location?
35 c) What criteria were used to determine the optimum sized charging
36 station?
37 d) Is Newfoundland Power proposing a similar charging station design? If
38 not, why not?
39
- 40 CA-NLH-029 (Reference Application) Please provide the following data on each of
41 Hydro's operating EV charging stations on a monthly basis since the start
42 of operation:
43 a) Average daily number of fast charges and L2 charges
44 b) Monthly revenue

- 1 c) Monthly operating costs
2
- 3 CA-NLH-030 (Reference Application)
4 a) How many BEVs are operating/registered on the island of
5 Newfoundland?
6 b) How many plug-in hybrids?
7
- 8 CA-NLH-031 (Reference Application) Can plug-in hybrid vehicles use fast-chargers?
9
- 10 CA-NLH-032 (Reference Application)
11 a) Are any of Hydro's EV charging stations operating in Newfoundland
12 Power's service area?
13 b) If so, how many?
14
- 15 CA-NLH-033 (Reference Application)
16 a) Should Hydro be installing additional EV stations before the
17 commissioning of Muskrat Falls and before reliability of its service is
18 assured?
19 b) What would be the opportunity cost of providing electricity in the
20 absence of Muskrat Falls supply?
21
- 22 CA-NLH-034 Please provide all studies pertaining to the costs of maintaining these
23 stations and who will bear the expenses relating to maintaining same?
24
- 25 CA-NLH-035 Please cite the statutory regulatory authority which provides the Board with
26 jurisdiction to consider this Application.
27
- 28 CA-NLH-036 Please inform as to Hydro's proposal to compensate ratepayers for the use
29 of ratepayer facilities to subsidize this new business opportunity for Hydro.
30

DATED at St. John's, Newfoundland and Labrador, this 15th day of July, 2021.

Per: 

Dennis Browne, Q.C.

Counsel for the 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