



September 4, 2015

Ms. G. Cheryl Blundon
Board of Commissioners of Public Utilities
120 Torbay Road, P.O. Box 12040
St. John's, NL A1A 5B2

Ladies & Gentlemen:

**Re: Newfoundland and Labrador Hydro 2016 Capital Budget Application
Requests for Information – CA-NLH-01 to CA-NLH-61**

In relation to the above noted application please find enclosed the Consumer Advocate's Requests for Information numbered CA-NLH-01 to CA-NLH-61.

A copy of the letter, together with enclosures, has been forwarded directly to the parties listed below.

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

Yours very truly,

O'DEA, EARLE

for THOMAS JOHNSON, Q.C.

TJ/cel

cc: Newfoundland & Labrador Hydro
P.O. Box 12400
500 Columbus Drive
St. John's, NL A1B 4K7
Attention: Geoffrey P. Young, Senior Legal Counsel

Newfoundland Power



P.O. Box 8910
55 Kenmount Road
St. John's, NL A1B 3P6
Attention: Gerard Hayes, Senior Legal Counsel

Corner Brook Pulp & Paper Limited,
c/o Stewart McKelvey
Cabot Place, 100 New Gower Street
P.O. Box 5038
St. John's, NL A1C 5V3
Attention: Paul Coxworthy

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

IN THE MATTER OF an Application by Newfoundland and Labrador Hydro for an Order approving: (1) its 2016 capital budget pursuant to s.41(1) of the Act; (2) its 2016 capital purchases, and construction projects in excess of \$50,000 pursuant to s.41 (3) (a) of the Act; (3) its leases in excess of \$5,000 pursuant to s. 41 (3) (b) of the Act; and (4) its estimated contributions in aid of construction for 2016 pursuant to s.41 (5) of the Act.

**Requests for Information by
The Consumer Advocate**

CA-NLH-01 to CA-NLH-61

September 4, 2015

1 **CA-NLH-01 Tab: 2016 Capital Plan: p. B-10/B-11 Environmental Assessment of**
2 **the Bay d’Espoir to Western Avalon Report**

3 Hydro outlines that this project was submitted for registration under Part 10 of the provincial
4 *Environmental Protection Act* on July 16, 2015 and that its preferred route is within the Bay
5 du Nord Wilderness Reserve (BDNWR) which requires the Lieutenant Governor in Council
6 to reduce the size of the wilderness reserve. What alternate routes are being considered as
7 part of the environmental assessment process?

8
9 **CA-NLH-02 Tab: 2016 Capital Plan: p. B-10/B-11 Environmental Assessment of**
10 **the Bay d’Espoir to Western Avalon Report**

11 For the alternative routes being considered in the environmental assessment, has Hydro
12 developed an estimate of the costs?

13
14 **CA-NLH-03 Tab: Holyrood Overview, p. 6**
15 Under Phase 3 – Synchronous Condenser Operation Phase, Hydro lists the systems at
16 Holyrood that will be requiring decommissioning. Has Hydro developed cost estimates for

1 the decommissioning of all the listed systems including for soil remediation associated with
2 the site?

3
4 **CA-NLH-04 Tab C – Projects \$500,000 and Over: p. C-43 – Replace Diesel Units,
5 Cartwright and Charlottetown**

6 Is there any recourse against the OEM of Unit 2079 installed in Charlottetown in light of its
7 premature failure?

8
9 **CA-NLH-05 Tab D – Projects Over \$200,000 and Less Than \$500,000: p. D-27 –
10 Replace Powerhouse No. 1 Station Service Transformer, Bay
11 d’Espoir**

12 Please outline the number of fault levels and arc flash levels occurring within the
13 powerhouse’s station service system during the last five (5) years.

14
15 **CA-NLH-06 Tab D – Projects Over \$200,000 and Less Than \$500,000: p. D-95 –
16 Replace Vibration Monitoring System Unit 7, Bay d’Espoir**

17 Will this project, and Hydro’s plans for the future, address all the recommendations set out at
18 pages D-154 and D-155?

19
20 **CA-NLH-07 Tab D – Projects Over \$200,000 and Less Than \$500,000: p. D-231 –
21 Perform Condition Assessment of Control Structure, Hinds Lake**

22 A Gate 1 Condition Assessment was completed during the week of February 16, 2015
23 (Appendix A, p. D-238). Does Hydro anticipate significantly different information will be
24 obtained by an additional inspection to justify including Gate 1 in the current proposed
25 project?

26
27 **CA-NLH-08 Tab D – Projects Over \$200,000 and Less Than \$500,000: p. D-292 –
28 Replace Human Machine Interface**

29 Please outline the “minor loss of control and inaccurate alarming on new installations” for
30 the existing HMI referred to by Hydro at p. D-293, including when the issues occurred and
31 how the issues were rectified.

1 **CA-NLH-09 Tab D – Projects Over \$200,000 and Less Than \$500,000: p. D-292 –**
2 **Replace Human Machine Interface**

3 Appendix A outlines the product support lifecycle provided by Schneider Electric. For all
4 versions except for Monitor Pro V2.0, rates are available at a cost until December 31, 2017.
5 What are the rates being referred to? Has Hydro inquired as to the cost of maintaining the
6 current systems until 2017?

7
8 **CA-NLH-10 Tab D – Projects Over \$200,000 and Less Than \$500,000: p. D-353 –**
9 **Replace Light Duty Mobile Equipment**

10 Does Hydro have any information regarding the replacement criteria of other utilities in
11 Atlantic Canada and throughout Canada for snowmobile and all-terrain vehicles used by
12 “Transmission Line crews”? Does Hydro have any information regarding the replacement
13 criteria of other utilities in Atlantic Canada and throughout Canada for snowmobile and all-
14 terrain vehicles for “others”?

15
16 **CA-NLH-11 Tab D – Projects Over \$200,000 and Less Than \$500,000: p. D-353 –**
17 **Replace Light Duty Mobile Equipment**

18 Please provide specifics regarding the established mobile equipment replacement
19 guidelines Hydro uses with other Canadian utilities through participation on the Canadian
20 utility fleet counsel.

21
22 **CA-NLH-12 Tab D – Projects Over \$200,000 and Less Than \$500,000: p. D-353 –**
23 **Replace Light Duty Mobile Equipment**

24 For all ATVs listed in Appendix A with age at retirement of 5.1 years, please outline which
25 category these ATVs fall into as outlined at p. D-355 (i.e. do they fall into the snowmobile/all-
26 terrain vehicles: transmission line crews or snowmobile/all-terrain vehicles: other).

27
28 **CA-NLH-13 Tab D – Projects Over \$200,000 and Less Than \$500,000: p. D-395 –**
29 **Implement Industrial Billing Software, Hydro Place**

30 What is the economic justification for this project in light of the few industrial customers who
31 operate in the province?

1 **CA-NLH-14** **Tab D – Projects Over \$200,000 and Less Than \$500,000: p. D-395 –**
2 **Implement Industrial Billing Software, Hydro Place**

3 Please provide details on all requests received by Hydro in the last 2 years for faster billing
4 cycles from industrial customers.

5
6 **CA-NLH-15** **Tab D – Projects Over \$200,000 and Less Than \$500,000: p. D-397 –**
7 **Replace Peripheral Infrastructure**

8 What is the increased cost of the extended maintenance with the manufacturer?
9

10 **CA-NLH-16** **Tab D – Projects Over \$200,000 and Less Than \$500,000: p. D-397 –**
11 **Replace Peripheral Infrastructure**

12 What does the extended maintenance cover?
13

14 **CA-NLH-17** **Tab E – Projects Over \$50,000 and Less Than \$200,000: p. E-56 –**
15 **Replace Video Conferencing Bridge, Hydro Place**

16 Please outline all issues Hydro has had with the video conferencing system in the last 5
17 years.
18

19 **CA-NLH-18** **Tab E – Projects Over \$50,000 and Less Than \$200,000: p. E-56 –**
20 **Replace Video Conferencing Bridge, Hydro Place**

21 What was the anticipated lifespan of the system when it was put in?
22

23 **CA-NLH-19** **Tab E – Projects Over \$50,000 and Less Than \$200,000: p. E-56 –**
24 **Replace Video Conferencing Bridge, Hydro Place**

25 How long have some of the components of the existing Polycom system not been supported
26 by the manufacturer?
27

28 **CA-NLH-20** **Tab E – Projects Over \$50,000 and Less Than \$200,000: p. E-66 –**
29 **Upgrade Access Roads to Microwave Sites, Gull Pond Hill and**
30 **Sandy Brook Hill**

31 Was the use of the helicopter for travel solely due to the road condition?
32

1 **CA-NLH-21 Tab E – Projects Over \$50,000 and Less Than \$200,000: p. E-66 –**
2 **Upgrade Access Roads to Microwave Sites, Gull Pond Hill and**
3 **Sandy Brook Hill**

4 Please outline incidents in the last 5 years where private fuel suppliers have been unable to
5 access the sites for fuel delivery solely due to road conditions.

6
7 **CA-NLH-22 Volume II, Tab 7 – Rehabilitate Shoreline Protection, Cat Arm**

8 Hydro outlines that the Alternative #2: Rock Armour Rehabilitation is the preferred method
9 and the least cost option. The proposed rock armour will be developed in a manner which
10 differs from what was utilized in 2005. How was the method of 2005 decided on? What
11 reviews and analysis did Hydro reply upon when choosing the rock armour pattern/method
12 in 2005?

13
14 **CA-NLH-23 Volume II, Tab 7 – Rehabilitate Shoreline Protection, Cat Arm**

15 To what extent is this expenditure brought about by the failure of the 2005 work?

16
17 **CA-NLH-24 Volume II, Tab 8 –Upgrade Distribution Systems**

18 How long has the majority of the line components identified for replacement been obsolete?

19
20 **CA-NLH-25 Volume II, Tab 8 –Upgrade Distribution Systems**

21 What is Hydro's inventory of on-hand spares for the line components identified for
22 replacement?

23
24 **CA-NLH-26 Volume III, Tab 11 – Additions for Load Growth – Isolated Generating**
25 **Stations, L'Anse-au-Loup and Postville Diesel Plant**

26 Please provide an update on the status of the 600 kw unit being replaced at L'Anse-au-Loup
27 with a 1,825 kw scheduled to occur during the summer of 2015.

28
29 **CA-NLH-27 Volume III, Tab 11 – Additions for Load Growth – Isolated Generating**
30 **Stations, L'Anse-au-Loup and Postville Diesel Plant**

31 At p. 12, Hydro outlines that it has a secondary supply of power from Hydro Quebec for the
32 L'Anse-au-Loup area. Please provide details as to the power supply arrangement with
33 Hydro Quebec.

1 **CA-NLH-28 Volume III, Tab 11 – Additions for Load Growth – Isolated Generating**
2 **Stations, L'Anse-au-Loup and Postville Diesel Plant**

3 Has Hydro considered approaching Hydro Quebec to address its forecasted shortfall? If so,
4 what are the costs of same? If not, why not?

5
6 **CA-NLH-29 Volume III, Tab 11 – Additions for Load Growth – Isolated Generating**
7 **Stations, L'Anse-au-Loup and Postville Diesel Plant**

8 Please provide details on the conservation and demand management programs that Hydro
9 is pursuing to reduce the demand in the short, medium and long term for its isolated diesel
10 systems in Labrador.

11
12 **CA-NLH-30 Volume III, Tab 11 – Additions for Load Growth – Isolated Generating**
13 **Stations, L'Anse-au-Loup and Postville Diesel Plant**

14 Please outline how the “direct load control pilot” Hydro is installing in Postville operates to
15 reduce maximum system demand.

16
17 **CA-NLH-31 Volume III, Tab 11 – Additions for Load Growth – Isolated Generating**
18 **Stations, L'Anse-au-Loup and Postville Diesel Plant**

19 Does the temporary nature of some of the L'Anse-au-Loup larger customers (i.e. the Valard
20 construction camp is expected to have a service life of 2 years) reduce the need for a new
21 unit in the long term?

22
23 **CA-NLH-32 Volume III, Tab 12 – Replace Diesel Units, Cartwright and**
24 **Charlottetown, Labrador**

25 Please identify the new genset manufacturer for the Charlottetown replacement unit. Is this
26 the same manufacturer who made unit 2079 which failed prematurely?

27
28 **CA-NLH-33 Volume III, Tab 14 – Wood Pole Line Management Program**

29 Hydro outlines in Section 3.2.3 (page 8) that: “Through this type of proper inspection and
30 maintenance the life of a transmission line could be extended by ten years or more.” Does
31 Hydro have any evidence to support this claim?

1 **CA-NLH-34 Volume III, Tab 17 – Insulator Replacement TL203**

2 Has Hydro contacted other utilities in Atlantic Canada or Canada in relation as to practices/
3 techniques used for inspection of insulator pins?

4
5 **CA-NLH-35 Volume III, Tab 17 – Insulator Replacement TL203**

6 Do any other utilities use high resolution cameras for the inspection of insulator pins? If so,
7 which utilities?

8
9 **CA-NLH-36 Volume III, Tab 18 – Replace Disconnect Switches**

10 What is the utility industry practice in terms of replacements based on age?

11
12 **CA-NLH-37 Volume III, Tab 19 – Replace Protective Relays**

13 Please provide a copy of the “draft transformer standard” prepared by Hydro in 2014.

14
15 **CA-NLH-38 Volume III, Tab 27 – Replace Roof on Services Building, Bishop’s
16 Falls**

17 At page 7 Hydro states that the added safety benefits provided by cold-applied systems
18 make it a clear cut choice for Hydro. Is the open flame heat source for the installation of the
19 traditional hot applied system the only safety benefit being referred to by Hydro? If not,
20 please list the safety benefits of the cold applied roof Hydro is referring to.

21
22 **CA-NLH-39 Volume III, Tab 27 – Replace Roof on Services Building, Bishop’s
23 Falls**

24 What is the cost of the hot applied roof versus the current proposal?

25
26 **CA-NLH-40 Volume III, Tab 27 – Replace Roof on Services Building, Bishop’s
27 Falls**

28 Hydro outlines that cold applied roof systems were developed in the early 1980s (p. 5, Tab
29 27). Was a cold applied roof system used in 1989? If not, why not?

1 **CA-NLH-41 Volume III, Tab 27 – Replace Roof on Services Building, Bishop’s**
2 **Falls**

3 In Appendix A, Tab 27 at p. A9, it is outlined that replacing the roof is a “Priority 2”. Further,
4 there is no recommendation on the roofing type. Has Hydro investigated whether a hot
5 applied roof is more cost efficient?
6

7 **CA-NLH-42 Volume III, Tab 27 – Replace Roof on Services Building, Bishop’s**
8 **Falls**

9 In Appendix A, Tab 27 at p. A9, it is stated that replacing the roof is a “Priority 2”. This
10 project is given a rank of 47 by Hydro. Please explain why this project cannot be
11 deferred.
12

13 **CA-NLH-43 Volume III, Tab 29 – Upgrade Digital Fault Recorders**

14 Please outline any spares for the fault recorders Hydro currently has on hand.
15

16 **CA-NLH-44 Volume III, Tab 29 – Upgrade Digital Fault Recorders**

17 Hydro states that the system is not considered entirely obsolete (p. 6) and is given a rank of
18 13 by Hydro. Given same, why can’t this project be deferred?
19

20 **CA-NLH-45 Volume III, Tab 30 – Replace Vehicles and Aerial Devices**

21 Comparing Table 1 and Table 2 on page 2, does Hydro have an explanation as to why its
22 kilometer criteria for light duty vehicles are not in line with two out of the three other Atlantic
23 electric utilities?
24

25 **CA-NLH-46 Volume III, Tab 30 – Replace Vehicles and Aerial Devices**

26 Comparing Table 1 and Table 2 on page 2, does Hydro have an explanation as to why its
27 criteria assessment for kilometers in heavy duty vehicles are less than all three of the other
28 Atlantic utilities surveyed?
29

30 **CA-NLH-47 Volume III, Tab 30 – Replace Vehicles and Aerial Devices**

31 At Appendix A Hydro outlines the vehicles to be replaced with the current proposal. Can
32 Hydro explain why some vehicles did not reach both the age and kilometer criteria for
33 replacement?
34

1 **CA-NLH-48 Volume III, Tab 30 – Replace Vehicles and Aerial Devices**

2 Is Hydro aware of what the other surveyed Atlantic electric utilities do if a vehicle has
3 reached age or kilometers but not both in terms of assessment and replacement?
4

5 **CA-NLH-49 Volume III, Tab 30 – Replace Vehicles and Aerial Devices**

6 Please provide details as to the specific criteria Hydro uses when reviewing a vehicle that
7 has reached either the years or kilometer threshold for assessment.
8

9 **CA-NLH-50 Volume III, Tab 30 – Replace Vehicles and Aerial Devices**

10 Hydro states at page 6:

11 **Prior to the preparation of the capital budget proposal, a review of the latest**
12 **version of the database is performed to select the units which meet the**
13 **replacement criteria for age or kilometers, and to verify those which should be**
14 **included in the capital budget proposal based on their maintenance history or**
15 **ongoing maintenance issues.**
16

17 For each of the vehicles listed in Appendix A, state whether the vehicle was included in the
18 current proposal based on the maintenance history or ongoing maintenance issues and
19 provide the details of same for each vehicle.
20

21 **CA-NLH-51 Volume III, Tab 32 – Replace MDR-4000 Microwave Radio (East)**

22 Please outline any spares or components Hydro has on hand for the current system.
23

24 **CA-NLH-52 Volume III, Tab 35 – Replace Personal Computers**

25 Why is there a one-year difference in the life cycle for laptops (4 years) versus desktops (5
26 years)?
27

28 **CA-NLH-53 Volume III, Tab 35 – Replace Personal Computers**

29 In Newfoundland Power's 2013 Capital Budget Application, Schedule B, page 83 of 93,
30 Newfoundland Power outlines that it is able to achieve a 5 year life cycle for its PC's, which
31 include desktop and laptop computers. Why is Hydro not able to achieve the same 5 year
32 cycle for its laptops?
33
34
35
36

1 **CA-NLH-54 Volume III, Tab 35 – Replace Personal Computers**

2 Hydro outlines that the cost of a laptop is approximately \$900.00 more than a desktop (page
3 2). Given this increase in cost, explain why some of the laptops (144) cannot be replaced
4 with desktops.

6 **CA-NLH-55 Volume III, Tab 39 – Vehicles and Aerial Devices Fleet Additions**

7 Please list the unique equipment used by Protection and Control technicians and Terminal
8 station electricians. Can their equipment fit in vehicles currently held by Hydro? What sort
9 of vehicles does Hydro intend to purchase for these positions?

11 **CA-NLH-56 Volume III, Tab 39 – Vehicles and Aerial Devices Fleet Additions**

12 Please provide the current response time for the Protection and Control technicians and
13 Terminal station electricians. What improvement does Hydro foresee with additional
14 vehicles?

16 **CA-NLH-57 Volume III, Tab 39 – Vehicles and Aerial Devices Fleet Additions**

17 How many apprentices does Hydro currently have? How does this number compare with
18 each of the past 5 years? How are the apprentices currently attending worksites with line
19 crews?

21 **CA-NLH-58 Volume III, Tab 39 – Vehicles and Aerial Devices Fleet Additions**

22 Has the office staff at Bishop's Falls ever used their own vehicles for a car pool? Has Hydro
23 discussed this with staff?

25 **CA-NLH-59 Volume III, Tab 39 – Vehicles and Aerial Devices Fleet Additions**

26 Did any of the meter readers who were using their own vehicles voice concerns or complain
27 to Hydro regarding same? If so, please provide the dates of complaints and the issues
28 raised by the meter readers regarding use of their own vehicles.

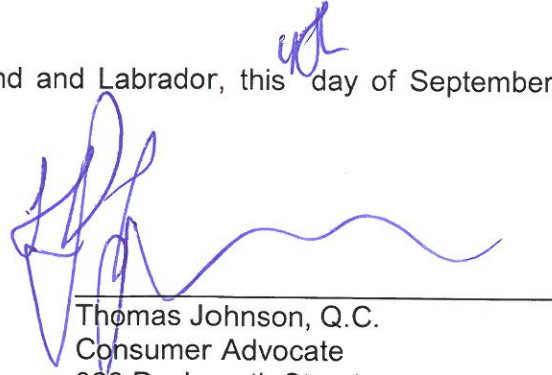
30 **CA-NLH-60 Volume III, Tab 39 – Vehicles and Aerial Devices Fleet Additions**

31 What is the cost of a meter reader using his/her own vehicle in terms of mileage versus the
32 purchasing of a new vehicle?

1 **CA-NLH-61 Volume III, Tab 39 – Vehicles and Aerial Devices Fleet Additions**

2 Hydro states at p. 5 that while the meter readers in some locations are using their personal
3 vehicles, Hydro can control the safety performance in meter reader vehicles when they are
4 owned by Hydro. Please detail any issues with safety performance of personal meter
5 reader vehicles over the last 5 years and what steps Hydro had to take to address same.

Dated at St. John's in the Province of Newfoundland and Labrador, this ²¹ day of September, 2015.



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