



September 24, 2014

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: The Board's Investigation and Hearing into supply Issues and Power Outages on the Island Interconnected System – Requests for Information**

Please find enclosed one (1) original and twelve (12) copies of the Consumer Advocate's Requests for Information (on three-hole punched paper):

1. CA-NLH-57 to CA-NLH-70;
2. CA-NP-16 to CA-NP-24.

If you have any questions please feel free to contact the undersigned.

Yours very truly,



O'DEA, EARLE

THOMAS JOHNSON  
TJ/cel  
Encl.

cc: Newfoundland and Labrador Hydro  
Attention: Geoffrey P. Young

Newfoundland Power  
Attention: Gerard Hayes

Island Industrial Customers Group  
Attention: Mr. Paul Coxworthy (Stewart McKelvey)

Mr. Danny Dumaresque

Grand Riverkeeper Labrador Inc.  
Attention: Ms. Roberta Frampton

**IN THE MATTER OF**

the *Electrical Power Control Act*, 1994,  
SNL 1994, Chapter E-5.1 (the "*EPCA*")  
and the *Public Utilities Act*, RSNL 1990,  
Chapter P-47 (the "*Act*"), as amended;

AND

**IN THE MATTER OF**

the Board's Investigation and Hearing  
into Supply Issues and Power Outages  
on the Island Interconnected System.

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**CONSUMER ADVOCATE  
REQUESTS FOR INFORMATION  
CA-NLH-57 to CA-NLH-70  
Issued: September 24, 2014**

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1 CA-NLH-57 (Response to CA-NLH-5) It is stated (page 1 of 2, lines 22 to 23)  
2 “*In addition to the above, each operating day, the Energy Control*  
3 *Centre (ECC) maintains a minimum spinning reserve equal to 70*  
4 *MW*”. Does this level of reserve satisfy NERC requirements, and  
5 will it be adequate post Muskrat Falls?  
6

7 CA-NLH-58 (Response to CA-NLH-6) Please provide similar details of Hydro’s  
8 planning and operating criteria and associated time frames for  
9 supply to the Avalon Peninsula as those included in the last  
10 paragraph of page 1 of 3 for the post Muskrat Falls time frame  
11 when Holyrood is no longer operational.  
12

13 CA-NLH-59 (Response to CA-NLH-10) Please provide an update of discussions  
14 with Corner Brook Pulp & Paper and other Industrial Customers  
15 relating to interruptible power for the coming winter and beyond,  
16 and provide an indication of when Hydro expects to make a  
17 submission with the Board.  
18

19 CA-NLH-60 (Response to CA-NLH-13) Under current legislation, is Hydro  
20 allowed to directly negotiate contracts with the Industrial  
21 Customers? If so, please provide supporting documentation.  
22

23 CA-NLH-61 (Response to CA-NLH-19) What is the current status of the diesel  
24 black start project at Holyrood?  
25

26 CA-NLH-62 (Response to CA-NLH-24) Is Hydro aware of the June 2009 report  
27 undertaken by Ernest Orlando Lawrence Berkeley National  
28 Laboratory entitled “*Estimated Value of Service Reliability for*  
29 *Electric Utility Customers in the United States*” prepared for the  
30 U.S. Department of Energy (see website:  
31 <http://certs.lbl.gov/pdf/lbnl-2132e.pdf>)? Does Hydro believe that

1 the conduct of a similar study specific to electricity consumers of  
2 this Province would provide useful information in addressing  
3 Liberty's statement (see Liberty's Interim Report, page ES-2):  
4 "*Liberty believes it is time to reassess the service reliability and*  
5 *cost balances that underlie the decisions on what level of supply*  
6 *resources to make available*"?

7  
8 CA-NLH-63 (Response to CA-NLH-25) Please file for the record the most  
9 recent Muskrat Falls Project Update if one more recent than June  
10 2014 is available.

11  
12 CA-NLH-64 (Response to CA-NLH-27) If there is an emergency supply  
13 situation in Newfoundland and Labrador (i.e., owing to severe  
14 weather), what is the likelihood of the emergency extending to  
15 Quebec, and to Nova Scotia and its neighbouring power systems,  
16 and how will this impact the amount of power available for  
17 Newfoundland and Labrador during such emergencies?

18  
19 CA-NLH-65 (Response to CA-NLH-28) Please provide the same table with the  
20 following two changes: 1) no emergency capacity support  
21 available over the Maritime and Labrador Island links, 2) with  
22 Muskrat Falls capacity included less the committed exports to  
23 Nova Scotia.

24  
25 CA-NLH-66 (Response to CA-NLH-30) For the year 2020 (i.e., post Muskrat  
26 Falls), what is the total transfer capacity of all transmission into the  
27 Avalon Peninsula assuming: 1) normal system conditions, and 2)  
28 assuming the loss of the most critical system element; i.e., based  
29 on n-1 criteria? In the year 2020, what will the total generation  
30 capacity located on the Avalon Peninsula be, and what is the  
31 forecast load in the year 2020 in terms of peak capacity (in MW)

1 on the Avalon Peninsula?

2

3 CA-NLH-67 (Response to CA-NLH-56)

4 *"It is required that controls and protections do not trip for low-*  
5 *voltage conditions up to one second in duration."*

6 Please identify the auxiliary power load(s) that require the  
7 converter station to be tripped if the supply voltage to the auxiliary  
8 power load is interrupted for more than one second?

9

10 CA-NLH-68 How many years of operation are expected with the HVDC  
11 converter station control and protection systems before they need  
12 to be replaced? What is the expected outage time to replace the  
13 HVDC converter station control system? What is the estimated  
14 cost to replace the HVDC converter station control and protection  
15 system?

16

17 CA-NLH-69 There are different HVDC manufacturers for the Labrador Link  
18 and Maritime Link converter stations. Each HVDC manufacturer  
19 will model their equipment and perform studies to validate the  
20 performance of the converter station control and protections in  
21 response to system disturbances in the high voltage network. Will  
22 each manufacturer need to model their competitor's converter  
23 station equipment to complete the validation studies? If yes, are  
24 agreements in place to provide these models? If there are no  
25 agreements, how will each manufacturer complete their validation  
26 studies?

27

28 CA-NLH-70 Will a power systems study consultant, independent from the two  
29 HVDC manufacturers, be retained to perform steady state, stability  
30 and transient studies to validate the performance of the Labrador  
31 Link, the Maritime Link, the synchronous condensers, power

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system stabilizers and other devices that may interact with each other? If yes, are agreements in place for the various manufacturer's models to be provided to the independent consultant? If no, what are the plans to validate the performance?

Dated at St. John's in the Province of Newfoundland and Labrador, this 24th day of September, 2014.



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