

NEWFOUNDLAND AND LABRADOR **BOARD OF COMMISSIONERS OF PUBLIC UTILITIES** 120 Torbay Road, P.O. Box 21040, St. John's, Newfoundland and Labrador, Canada, A1A 5B2

E-mail: gyoung@nlh.nl.ca

2013-04-02

Mr. Geoffrey Young Senior Legal Counsel Newfoundland and Labrador Hydro P.O. Box 12400 St. John's, NL A1B 4K7

Dear Mr. Young:

Newfoundland and Labrador Hydro - Application for approval to proceed with Re: the installation of an additional 230 kV transformer at the Oxen Pond Terminal Station.

Enclosed are Information Requests PUB-NLH-1 to PUB-NLH-13 regarding the above noted application.

If you have any questions, please do not hesitate to contact the Board's Legal Counsel, Ms. Jacqui Glynn, by telephone at 726-6781 or e-mail: jgylnn@pub.nl.ca.

Yours truly,

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Chervl Blundon **Board Secretary**

/cpj Encl.

- c.c.
- Mr. Gerard Hayes, E-mail: ghayes@newfoundlandpower.com Mr. Thomas Johnson, E-mail: tjohnson@odeaearle@nf.ca Mr. Paul Coxworthy, E-mail: pcoxworthy@smss.com Mr. Dean Porter, E-mail: dporter@pa-law.ca

Cheryl Blundon, Director of Corporate Services and Board Secretary, Tel: 709-726-8600, E-Mail: cblundon@pub.nl.ca

1 IN THE MATTER OF

- 2 the Electrical Power Control Act, 1994,
- 3 SNL 1994, Chapter E-5.1 (the "EPCA")
- 4 and the Public Utilities Act, RSNL 1990,
- 5 Chapter P-47 (the "Act"), as amended;
- 6
- 7 8

AND

9 10

11 IN THE MATTER OF

- 12 an application by Newfoundland and Labrador
- 13 Hydro pursuant to Subsection 41 of the *Act* for
- 14 approval of a capital project to install additional
- 15 230 kV transformer capacity at the Oxen
- 16 Pond Terminal Station.

PUBLIC UTILITIES BOARD REQUESTS FOR INFORMATION

PUB-NLH-1 to PUB-NLH-13

Issued: April 2, 2013

1 2 3	PUB-NLH-1	Page 4, "Given the substantial increase in capital cost for the preferred alternative, Hydro deemed it prudent to refresh the entire analysis."
4 5 6 7		In table form, please provide a detailed comparison of the components of the original estimate with the components of the current estimate of the preferred alternative.
/ 8 9	PUB-NLH-2	Page 7, "For analysis purposes the Hardwoods combustion turbine is set to provide 45 MW and 28 MVAR to the system."
10 11 12		Please provide the latest timeline for the return to service of the Hardwoods combustion turbine.
13 14 15 16	PUB-NLH-3	Page 7, "As a result of the impedance mismatch, the total installed transformer capacity with the largest unit out of service is reduced by 31.8 MVA to 484.6 MVA,"
17 18 19 20		Please confirm that this reduction as well as that noted in footnote 5 on page 7 can, if needed in an extreme event, be used by switching on the Newfoundland Power Inc. system and is not in fact "lost".
21 22 23 24	PUB-NLH-4	Page 19, "For loss of a 230/69 kV transformer at Holyrood the criteria permits the operation of the Holyrood combustion turbine and opening of NP 38L to off load the remaining unit over peak."
25 26 27 28		Please provide the most recent timeline for the return to service of the Holyrood gas turbine or a replacement unit so that the above noted criteria are not being violated.
29 30 31 32 32	PUB-NLH-5	Page 33, "Table 20 provides the calculations of the transformer loading for the Hardwoods – Oxen Pond Loop under loss of the largest transformer (i.e. 125 MVA) in the loop."
33 34 35 36 37		Page 33, "A review of the individual station loads, as shown in Table 19, indicates that under normal operation the load at Oxen Pond Terminal Station is expected to equal and exceed the installed transformer capacity in that station in the 2013-2014 time frame."
38 39 40		Please confirm that the references should be Table 21 and Table 20 respectively.

1 2 2	PUB-NLH-6	Page 41, Table 22, Footnote 3, "2018 - 2031 requirements based on NP purchase location energy shares."
5 4		Please provide an explanation of "purchase location energy shares".
5 6 7	PUB-NLH-7	Page 45, "In addition, the alternative includes relocation of the old T2 75/100/125 MVA Oxen Pond unit to Hardwoods."
8 9 10 11		Please confirm that all costs associated with the Hardwoods Terminal Station related to the preferred alternative, including the relocation of the old Oxen Pond unit to Hardwoods, are included in the current budget estimate.
12 13 14 15 16 17	PUB-NLH-8	Page 46, "Utilizing a short run of 230 kV buried power cable the end of the existing B1L18 circuit breaker bay that once connected TL-218 is connected to one end of the buried power cable and the opposite end connected to the newly established 230 kV bus B6."
17 18 19 20 21 22 23 24		Please describe the type of buried cable to be employed, including any known history of the use of this cable, any operational benefits and drawbacks of using this type of buried cable (e.g. required spares, in-house or external maintenance), and any available information on the estimated impact on Newfoundland and Labrador Hydro's Operating and Maintenance costs of the use of this type of cable (i.e. a cost benefit analysis that compares the use of this type of buried cable with other alternatives).
25 26 27 28	PUB-NLH-9	Page 48, "Load flow analysis indicates that the Hardwoods-Oxen Pond Loop firm transformer capacity will permit delivery of 777 MW under single loss of largest unit (i.e. 250 MVA) contingency."
29 30 31		Please provide evidence that Newfoundland Power Inc. has confirmed that the 777 MW can be delivered under single loss of largest unit contingency.
32 33 34 35 26	PUB-NLH-10	Page 52, "Loss of the 230/66 kV transformer at Stephenville results in operation of the Stephenville combustion turbine to supply the load at Stephenville and surrounding area."
30 37 38		Please provide the latest timeline for the return to service of the Stephenville combustion turbine.
39 40 41 42	PUB-NLH-11	Please provide dates, details and results of discussions with Newfoundland Power Inc. regarding the development of this project and the preferred alternative.
43 44 45 46	PUB-NLH-12	Given the increase in size of the units proposed to be purchased and installed, please provide details of any possible obstacles to the transportation and installation of the two new transformers under the preferred alternative (e.g.

1		road restriction regarding weight and height), and outline how Newfoundland
2		and Labrador Hydro intends to deal with these obstacles.
3		
4	PUB-NLH-13	Beginning on page 21 Newfoundland and Labrador Hydro has outlined that
5		there has been an issue with the receipt of demand forecasts from
6		Newfoundland Power Inc. and the resulting unanticipated advancement of the
7		installation of additional transformer capacity at the Oxen Pond Terminal
8		Station. Please provide details of what steps Newfoudndland and Labrador
9		Hydro has undertaken to ensure that appropriate delivery point load forecasts
10		are provided to Newfoundland and Labrador Hydro in a timely manner so that
11		these forecasts can be integrated into the capital budget planning process.

DATED at St. John's, Newfoundland this 2nd day of April, 2013.

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

Cheryl Blundon Board Secretary Per ____