

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: TraceyPennell@nlh.nl.ca

2016-12-16

Ms. Tracey Pennell Senior Counsel Newfoundland and Labrador Hydro P.O. Box 12400 St. John's, NL A1B 4K7

Dear Ms. Pennell:

Re: Investigation and Hearing into Supply Issues and Power Outages on the Island Interconnected System - Phase Two - Requests for Information PUB-NLH-624 to PUB-NLH-639 (Energy Supply Risk Assessment Update, November 30, 2016)

Enclosed are Requests for Information (RFIs) PUB-NLH-624 to PUB-NLH-639 in relation to Energy Supply Risk Assessment Update, November 30, 2016.

If you have any questions, please do not hesitate to contact the Board's Legal Counsel, Ms. Jacqui Glynn, by email, jglynn@pub.nl.ca or telephone (709) 726-6781.

Yours truly,

Hundon

Cheryl Blundon Board Secretary

cpj Enclosure

 ecc Newfoundland and Labrador Hydro Mr. Geoff Young, Email: gyoung@nlh.nl.ca NLH Regulatory, E-mail: NLHRegulatory@nlh.nl.ca Newfoundland Power Inc. Mr. Gerard Hayes, E-mail: gbayes@newfoundlandpower.com Mr. Ian Kelly, QC, E-mail: ikelly@curtisdawe.com NP Regulatory, E-mail: regulatory@newfoundlandpower.com <u>Consumer Advocate</u> Mr. Dennis Browne, Q.C., E-mail: dbrowne@bfma-law.com Mr. Stephen Fitzgerald, E-mail: stratfitzgerald@bfma-law.com Ms. Sarah Fitzgerald, E-mail: stratfitzgerald@bfma-law.com Ms. Bernice Bailey, E-mail: bbailey@bfma-law.com

Industrial Customer Group

Mr. Paul Coxworthy, E-mail: pcoxworthy@stewartmckeivey.com Mr. Dean Porter, E-mail: dporter@poolealthouse.ca <u>Tack Resources Limited</u> Mr. Larry Bartlett, E-mail: larry.bartlett@teck.com <u>Vale Newfoundland and Labrador Limited</u> Mr. Denis Fleming, E-mail: dfleming@coxandpalmer.com <u>Grand Riverkeeper Labrador, Inc.</u> Ms. Roberta Frampton Benefiel, E-Mail: rebnfl@gmail.com Mr. Philip Raphals, E-mail: Philip@centrehelios.org Ms. Prunelle Thibcau-Bedard, E-mail: prunelletb@gmail.com <u>Mr. Danny Dumaresque</u> Mr. Danny Dumaresque, E-mail: danny.liberal@gmail.com

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; and
- 5 6
- 7 IN THE MATTER OF the Board's Investigation
- 8 and Hearing into Supply Issues and Power Outages
- 9 on the Island Interconnected System.

PUBLIC UTILITIES BOARD REQUESTS FOR INFORMATION

PUB-NLH-624 to PUB-NLH-639

Issued: December 16, 2016

1 PUB-NLH-624 Reference: Energy Supply Risk Assessment Update, November 30, 2016. 2 Please describe the extent to which generation outages are considered in 3 the estimation of transmission losses. Specifically, are allowances made 4 for significant outages of generation closer to the load center with the 5 need for replacement generation located a greater distance from the load 6 center? 7 8 PUB-NLH-625 Reference: Energy Supply Risk Assessment Update, November 30, 2016. 9 page 29, line 1. The discussion of transmission losses implies that full 10 capacity from Holyrood is on line and assumed in the estimation of 11 losses. What is the impact on transmission losses of one or two Holyrood 12 units off at peak demand? 13 14 PUB-NLH-626 Reference: Energy Supply Risk Assessment Update, November 30, 2016. 15 page 28, line 10 to page 29, line 1. Please provide the data submitted to Hvdro by Newfoundland Power associated with the October 7, 2016 load 16 17 forecast. Please include any data reconciling the forecast to prior 18 forecasts. 19 20 PUB-NLH-627 Reference: Energy Supply Risk Assessment Update, November 30, 2016. 21 page 29, footnote 21. Hydro indicates that the trend of Newfoundland 22 Power's load forecasts "are supported by Hydro's own internal forecast 23 models for this service territory". Please provide details on the Hydro 24 models referred to and the data from those models that support the cited 25 trend. 26 27 PUB-NLH-628 Energy Supply Risk Assessment Update, November 30, 2016. Hydro has 28 stated the intent to comply with NERC/NPCC criteria at an as-yet 29 undefined time in the future. NPCC planning criteria require an LOLE of 30 0.1 (Directory 1, Requirement 4). Will compliance with this requirement 31 be delayed until after the actual in-service date of Muskrat Falls or, 32 alternately, if earlier compliance is planned how will the use of a LOLE 33 of 0.1 impact the conclusions in the Energy Supply Risk Assessment 34 Update, November 30, 2016? 35 36 PUB-NLH-629 Reference: Energy Supply Risk Assessment Update, November 30, 2016. 37 pages 36 and 37. Please provide revised Tables 9, 10 and 11 for a revised 38 study period extended to the winter 2021-2022, inclusive. 39 40 PUB-NLH-630 Reference: Energy Supply Risk Assessment Update, November 30, 2016, 41 page 33, line 25. Hydro has assumed that 110 MW of recall power will 42 be available to the IIS via the LIL. Has Hydro completed the studies 43 required to verify that this is technically feasible? 44 45 PUB-NLH-631 Reference: Energy Supply Risk Assessment Update, November 30, 2016, 46 page 19, line 1. Hydro states that the Holyrood units are considered

1 available for full load operation "from a reheater tube perspective". Are 2 the units considered available for full load operation from other 3 perspectives? If no, explain any restrictions on full load that are 4 applicable. 5 6 PUB-NLH-632 Reference: Energy Supply Risk Assessment Update, November 30, 2016, 7 page 34, line 10. Hydro has assumed that the Holyrood units will not run 8 at their gross continuous unit ratings during normal operation. Please 9 describe the conditions and any time limits for which maximum output 10 will be permitted. 11 12 PUB-NLH-633 Reference: Energy Supply Risk Assessment Update, November 30, 2016. 13 page 14, lines 4-8. When is the root cause investigation of the Bay 14 d'Espoir Penstock 1 leak expected to be complete? 15 16 PUB-NLH-634 Reference: Energy Supply Risk Assessment Update, November 30, 2016, 17 Appendix A, page 3. The methodology includes the assumption of a 18 forced outage of 30 days for each Holyrood unit, in addition to other 19 forced outages. Please explain how the 30-day assumption is reflected in 20 the DAFOR estimates, considering that it represents 25% of the peak 21 season (December 1 to March 31). 22 23 PUB-NLH-635 Reference: Energy Supply Risk Assessment Update, November 30, 2016, 24 Appendix A. The DAFORs for the Holyrood units in the off-peak months 25 would seem to be irrelevant and have the potential to provide misleading 26 results. Would it be more appropriate to calculate historical DAFORs for 27 only the on-peak months or, alternately, use UFOP instead of DAFOR? 28 Please comment on how the conclusions regarding Holyrood reliability 29 might differ. 30 31 PUB-NLH-636 Reference: Energy Supply Risk Assessment Update, November 30, 2016, 32 page 26, Table 2 and Appendix A, page 5. Please provide the definition 33 and equation for UFOP, and provide a spreadsheet with the underlying 34 data used by Hydro to calculate UFOP for Hardwoods and Stephenville 35 for the past five years. 36 37 PUB-NLH-637 Reference: Energy Supply Risk Assessment Update, November 30, 2016. It is our understanding that UFOP is a legitimate measure of the 38 39 probability that a peaking unit will be available, but it does not reflect the 40 probability that the unit will start when asked. On that basis, does Hydro's use of UFOP in the supply analysis overstate the reliability of 41 42 Hardwoods and Stephenville? Would an adjustment to UFOP for starting 43 reliability be appropriate? 44 45 Please provide the actual annual starting reliability (SR in NERC's PUB-NLH-638 46 GADS system) of Hardwoods and Stephenville for the past five years.

1	PUB-NLH-639
2	
3	
4	

Reference: Energy Supply Risk Assessment Update, November 30, 2016, page 22, lines 11-13. Has the assessment by GE been completed? If yes, describe the remedial actions identified by GE and the actions planned by Hydro to address the recommendations.

DATED at St. John's, Newfoundland this 16th day of December 2016.

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

r______ Cheryl/Blyndon Per 🖉

Cheryl/Blundon Board Secretary