

IN THE MATTER OF

the *Electrical Power Control Act*, RSNL 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

an Application by Newfoundland and Labrador Hydro ("Hydro") for an Order:

- 1) approving its 2013 capital budget pursuant to s.41(1) of the *Act*;
- 2) approving 2013 capital purchases and construction projects in excess of \$50,000 pursuant to s.41(3)(a) of the *Act*;
- 3) approving its estimated contributions in aid of construction for 2013 pursuant to s.41 of the *Act*; and
- 4) fixing and determining its average rate base for 2011 pursuant to s.78 of the *Act*.

**PUBLIC UTILITIES BOARD
REQUESTS FOR INFORMATION**

PUB-NLH-1 to PUB-NLH-30

Issued: August 29, 2012

- 1 **PUB-NLH-1** Please provide an updated Generation Planning Issues report.
2
- 3 **PUB-NLH-2** Please provide a copy of Hydro's most recent Planning Load Forecast.
4
- 5 **PUB-NLH-3** In Board Order No. P.U. 2(2012), p. 12, the Board stated:
6
7 *"Therefore in future capital budget applications Hydro should provide its*
8 *ranking of proposed capital projects including the underlying details in relation*
9 *to the prioritization criteria."*
10
11 Please provide a detailed explanation of how the ranking of each project of the
12 2013 Capital Budget Application was determined, including the breakdown of
13 each priority value.
14
- 15 **PUB-NLH-4** Please provide an update on the projects entitled:
16
17 (i) Install Additional 230 kV Transformer - Oxen Pond Terminal
18 Station;
19 (ii) Upgrade Marine Terminal, Holyrood; and
20 (iii) Upgrade Transmission Line Corridor - Bay d'Espoir to Western
21 Avalon.
22
- 23 **PUB-NLH-5** In the five-year plan of Hydro's 2012 Capital Budget, Hydro forecast the 2013
24 Capital Budget to be \$121,369,000, while the current 2013 Capital Budget
25 Application requests approval of \$66,144,800. Please provide a reconciliation
26 of these two forecasts including an explanation of why the priority of each
27 delayed or accelerated project has changed.
28
- 29 **PUB-NLH-6** In Board Order No. P.U. 5(2012), p. 14, in discussing future capital
30 expenditures relating to the Hydro Holyrood Thermal Generating Station, the
31 Board agreed with Newfoundland Power Inc. that:
32
33 *"...an overview may assist the evaluation of capital expenditure proposals in*
34 *relation to the Holyrood Thermal Generating Station. The Board accepts*
35 *Newfoundland Power's suggestions as to what should be included in this*
36 *overview with the proviso that the Industrial Customers and the Consumer*
37 *Advocate are provided an opportunity to comment as to the specific content of*
38 *this overview."*
39
40 The suggestions made by Newfoundland Power Inc. state that an overview
41 should contain the following:
42
43 *"1. an updated outlook regarding anticipated changes in the role of Holyrood on*
44 *the system;*
45 *2. an updated schedule of anticipated changes in Holyrood operations that may*
46 *reasonably be expected to have an impact on capital expenditure requirements;*
47 *3. a summary description of all proposed Holyrood capital projects, including an*

1 *explanation of how such projects relate to one another and whether such projects*
 2 *may be impacted by decisions yet to be taken regarding Holyrood's role on the*
 3 *system;*

4 *4. a summary guide to all internal and external reports filed in support of the*
 5 *capital expenditure proposals, summarizing alternatives considered and*
 6 *recommendations made; and*

7 *5. an explanation of the necessity of all proposed capital expenditures in the*
 8 *context of the anticipated changes in Holyrood operations."*

9 (Newfoundland Power, Submission Phase II, pg. 8)

10
 11 For each of the Holyrood capital projects please explain whether the
 12 equipment is required for synchronous condenser mode of operation and, if
 13 not, why the expenditure is necessary now in the last few years of operation of
 14 the plant in generation mode.

15
 16 **PUB-NLH-7** How has Hydro dealt with the provision of an opportunity to the Industrial
 17 Customers and to the Consumer Advocate to comment as to the specific
 18 content in the overview to be provided to the Board? Please provide any
 19 related documentation.

20
 21 **PUB-NLH-8** Please provide the date of the load information which is reflected in Chart 4 of
 22 the 2013 Capital Plan, Forecast Holyrood Generation Requirements.

23
 24
 25 **Reference: C-6: Install Variable Frequency Drives on Forced Draft Fans, Holyrood;**
 26 **2013: \$697,600; 2014: \$2,659,700**

27
 28 In the report entitled: Install Variable Frequency Drives on Six Forced Draft
 29 Fans, located in Volume I, Tab 2, Hydro states, in the Summary, p. i, that:

30
 31 *"This project will yield an annual savings of \$2.2 million while the Holyrood*
 32 *plant is generating electricity when compared to the status quo of constant speed*
 33 *fan motors."*

34
 35 On p. 8 of the same report Hydro states that:

36
 37 *"Once operational the VFDs will yield an average annual fuel savings of \$4.7*
 38 *million to Hydro while the Holyrood Thermal Plant is generating electricity."*

39
 40 These numbers are also found in other sections of the report.

41
 42 **PUB-NLH-9** Please explain the relationship between the \$2.2 million shown on p. i and the
 43 \$4.7 million shown on p. 8, and show why they are different.

44
 45 **PUB-NLH-10** In the formula found on p. 7 of the report, please provide the cost per barrel of
 46 oil used in the calculation.

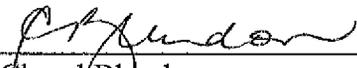
- 1 **PUB-NLH-11** In the formula found on p. 7 of the report, please provide the efficiency factor
2 used in the calculation.
3
- 4 **PUB-NLH-12** Please provide a copy of the 2012 System Operation Holyrood Production
5 Forecast that was used in the analysis, the results of which are found on p. 8 of
6 this report.
7
- 8 **PUB-NLH-13** Please provide a copy of the Nalcor Energy Corporate Planning Forecast,
9 January 2012, which has provided information used in the present value
10 analysis of the installation of variable frequency drives on forced draft fans.
11
- 12 **PUB-NLH-14** Please recalculate the Net Present Value Analysis found in Table 2, p. 8 of the
13 report using test year figures for the efficiency factor and the 2012 forecast
14 cost of a barrel of oil, used in the application for approval of a rate, effective
15 July 1, 2012, to be charged to Newfoundland Power Inc.
16
17
- 18 **Reference:** **C-12, Tab 5: Complete Condition Assessment Phase 2 (Year 2)**
19
- 20 **PUB-NLH-15** Provide a summary chart of the information in Appendix D at Tab 5 for each
21 unit and in addition provide the same information for the previous seven
22 years, so that outage statistics for the last ten years are shown.
23
24
- 25 **Reference:** **C-16, Tab 7: Install Backup System for Raw Water Supply and Clarifier**
26 **– Holyrood; \$955,600**
27
- 28 **PUB-NLH-16** Please provide the details for the calculation of the Base Outage Time (days)
29 as shown in Table 2, p. 11 of Appendix A under Tab 7.
30
- 31 **PUB-NLH-17** Is a raw water system and clarifier necessary in synchronous condenser mode
32 of operation?
33
- 34 **PUB-NLH-18** Is a backup system required for synchronous condenser mode of operation
35 and, if so, provide an explanation?
36
- 37 **PUB-NLH-19** What is the useful life of the raw water system and clarifier and when is it
38 expected that it will be necessary to upgrade, refurbish or replace.
39
- 40 **PUB-NLH-20** As the Holyrood plant has been in operation without a backup raw water
41 system for decades and the AON Reed Stenhouse Inc. recommendation was
42 made in 2007. Provide an explanation why this work is necessary now at this
43 stage of plant operations.

- 1 **Reference:** **C-22, Tab 10: Upgrade Fuel Oil Day Tank – Holyrood; \$584,200**
2
3 In the report entitled: Upgrade Fuel Oil Day Tank, located in Volume II, Tab
4 10, Hydro states that:
5
6 *“The American Petroleum Institute (API) recommends that tanks, such as the day*
7 *tank at Holyrood, undergo an external inspection every five years and an*
8 *internal inspection every ten years after its initial service date. The required*
9 *inspection procedures are outlined in API Standard 653, Tank Inspection,*
10 *Repair, Alteration, and Reconstruction. The day tank at Holyrood has not been*
11 *inspected since 1998. Therefore, it is recommended that the tank undergo a full*
12 *inspection that is in compliance with the API 653 standard in 2013.”*
13
- 14 **PUB-NLH-21** In which year was API Standard 653 published?
15
- 16 **PUB-NLH-22** What has changed to make this inspection a priority in 2013?
17
- 18 **PUB-NLH-23** What is the useful life on the new floor installed in 1998?
19
- 20 **PUB-NLH-24** What is the purpose of the day tank and can it be by-passed, if necessary, for
21 the remaining years of generation operations at the plant?
22
23
- 24 **Reference:** **C-27, Tab 12: Additions for Load Isolated Generation Stations – Various**
25 **Sites; 2013: \$2,040,200; 2014: \$9,357,900**
26
27 In previous information provided by Hydro to the Board it has been noted that
28 the cost of installation of fire protection systems in its diesel plants was not
29 cost effective. The current application is recommending a fire protection
30 system be installed at the Hopedale plant.
31
- 32 **PUB-NLH-25** Is this a change in Hydro’s philosophy regarding fire protection in its diesel
33 plants? If so, please explain the rationale for the change.
34
- 35 **PUB-NLH-26** Can the Board expect to see more requests for approval of fire protection
36 systems in diesel plants in future applications?
37
38
- 39 **Reference:** **C-58: Install Automatic Metering Reading; 2013: \$397,900; 2014:**
40 **\$258,800**
41
- 42 **PUB-NLH-27** Does this project include the purchase of AMR meters, or simply the
43 supporting infrastructure for the implementation of AMR meters?

- 1 **Reference:** **E-45: Purchase meters, Equipment and Metering Tanks; \$199,500**
- 2
- 3 **PUB-NLH-28** Is this project related to the project found on p. C-58? If so, how is it related?
- 4
- 5 **PUB-NLH-29** Are all of the meters purchased in this project suitable for AMR purposes? If
- 6 not, please provide a description of the various types of meters being
- 7 purchased.
- 8
- 9
- 10 **Reference:** **C-60, Tab 24: Replace Vehicles and Aerial Devices; 2013: \$1,302,300;**
- 11 **2014: \$697,200**
- 12
- 13 According to p. 2 of the report entitled: Replace Vehicles and Aerial Devices,
- 14 the criteria for the replacement of light-duty vehicles is 5-7 years or 150,000
- 15 kilometers. According to the chart on p. A2, unit # V1331 is being replaced at
- 16 an age of 3.3 years and mileage reading of 34,377 kilometers.
- 17
- 18 **PUB-NLH-30** Please provide details on how this replacement adheres to the established
- 19 criteria for vehicle replacement.

DATED at St. John's, Newfoundland and Labrador this 29th day of August, 2012.

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

Per 
Cheryl Blundon
Board Secretary