

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:

- 1) approving its 2008 capital budget, pursuant to s.41(1) of the *Act*;
- 2) approving its 2008 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 2008, pursuant to s. 41(5) of the *Act* ; and
- 4) fixing and determining its average rate base for 2006, pursuant to s. 78 of the *Act*.

**PUBLIC UTILITIES BOARD
REQUESTS FOR INFORMATION**

PUB-NLH-1 to PUB-NLH-83

Issued: August 31, 2007

RE: Page B-5, Upgrade Spherical Valve Maintenance Seals, \$1,059,700

PUB NLH 1.0

When were the seals being upgraded commissioned?

PUB NLH 2.0

What is the normal expected life of seals of this type?

PUB NLH 3.0

Who will perform the retrofit on these spherical valve maintenance seals?

PUB NLH 4.0

In the options evaluated by Hydro for the retrofit of these seals, was the original manufacturer considered as a possible means of effecting savings?

PUB NLH 5.0

Please provide a detailed cost benefit analysis showing all options considered.

RE: Page B-11, Replace Cooling Water Systems Units 1 and 2, \$263,600

PUB NLH 6.0

Please provide a copy of the cooling water system study that was performed in 2002 for all hydro plants.

PUB NLH 7.0

Please provide a schedule, including actual costs or forecast costs, of all plants where piping has been or is planned to be replaced.

Page B-14, Replace 40 kW Diesel Generator, \$157,200

PUB NLH 8.0

Please provide a cost benefit analysis showing the benefit of replacing this diesel generator with one of the same size and with a 50 kW unit over performing another overhaul including the replacement of the crank shaft and block.

Page B-16, Install Meteorological Stations, \$222,000

PUB NLH 9.0

Please provide any available reports that support the statement that "In the past decisions to spill would not have been made if the data to be provided by the proposed stations had been available."

PUB NLH 10.0

Please provide a cost benefit analysis, if available, supporting the installation of meteorological stations at these four sites.

Page B-20, Replace Cooling Water Piping System, \$193,400**PUB NLH 11.0**

Has Hydro undertaken, using consultants or its own staff, a condition review, including recommendations, of all of the mild steel piping in its systems that is used for turbine/generator cooling water? If so, please provide a copy.

Page B-23, Salmon Spillway Stoplog Handling System, \$140,600**PUB NLH 12.0**

Are there available from Hydro's Occupational Health and Safety Committee reports outlining the safety issues involved in using conventional boom trucks to undertake this work? If so, please provide a copy.

Page B-25, Upgrade Intake #4 Gate Controls, \$115,500**PUB NLH 13.0**

What is the age of the controls currently being used?

PUB NLH 14.0

Please provide documentation outlining the problems encountered during the two major incidents that occurred during penstock filling.

PUB NLH 15.0

Please provide a listing of all intake gates, the types of controls being used on each of these gates and the proposed dates of replacement for any scheduled to be replaced.

Page B-38, Replace Unit 2 High Pressure Heater, \$19,600 (2007), \$919,400 (2008)**PUB NLH 16.0**

Please provide an Engineering Report, if available, that details an inspection of the high pressure heater and discusses the options, including a cost benefit analysis, for dealing with this problem.

Page B-40, Upgrade Continuous Emissions Monitoring System, \$688,900**PUB NLH 17.0**

Please provide a copy of the plan that was submitted to the Director, as indicated on page 16 of 20, paragraph 72, of the Certificate of Approval issued on February 2, 2006 by the Department of Environment and Conservation.

Page B-41, Replace Unit 1 and 2 Condenser Valve Actuators, \$312,800**PUB NLH 18.0**

How many lost time incidents and man hours lost have resulted in each year from 2002-2007 from the use of large butterfly valves associated with condensers?

PUB NLH 19.0

Please provide a schedule showing any other sites that have similar large butterfly valves and the planned replacement schedule for those valves.

Page B-43, Replace Unit 2 Electromechanical Trip Devices (EDT), \$305,300**PUB NLH 20.0**

Please provide a breakdown of costs and a cost benefit analysis showing the financial advantage of combining this project with the proposed Generator Auto Synchronization (page B-59) and the Steam Seal Regulator (page B-50) projects.

Page B-46, Precipitator and Scrubber Installation Study, \$272,200**PUB NLH 21.0**

What is the "new Federal Government Regulatory Framework for Air Emissions"?

PUB NLH 22.0

Please provide a copy of the section that is relevant to the performance of this generating station.

Page B-50, Replace Unit 2 Main Steam Stop Valve, \$171,300**PUB NLH 23.0**

Please explain, including information on cost, why "The new valve was purchased and delivered to the plant in 2006."

Page B-54, Upgrade Ambient Monitoring Station, \$127,600

PUB NLH 24.0

What are the uptime targets and what is the source of these targets?

PUB NLH 25.0

Which sites, showing the availability of each, have demonstrated an availability of less than 95%?

PUB NLH 26.0

What reasons have been determined for the decreased availability of each site that is less than 95%?

Page B-56 Stack Breaching Study, \$115,100

PUB NLH 27.0

When was the breaching installed in each of the stacks?

PUB NLH 28.0

In each of the stacks when, and at what cost, were borosilicate tiles last replaced?

PUB NLH 29.0

Is there available an Engineering study of the condition of the stack breaching? If so, please provide a copy.

Page B-68, Replace Champion Grader V-9797, \$404,400

PUB NLH 30.0

What is the normal expected life of a Champion Grader of this type?

PUB NLH 31.0

Please provide maintenance records for 2005 – 2007 showing the breakdown rate of this grader.

PUB NLH 32.0

Please provide a cost benefit analysis showing the benefit of purchasing a new grader versus the repair of the current grader.

PUB NLH 33.0

What will be done with the machine that is proposed to be replaced?

Page B-71, Replace Battery Banks and Chargers, \$430,400**PUB NLH 34.0**

Please restate the table shown on the bottom of page B-71 to include the number of units purchased in each year, the average cost per unit for each year, and the forecast information for 2007.

PUB NLH 35.0

Please restate the cost benefit analysis provided on page 13 of the report filed under Section H, Tab 4, to include details.

Page B-73, Replace Disconnect Switches, \$367,600**PUB NLH 36.0**

Please provide a schedule for the period from 2002 – 2007F showing how many similar disconnects have been replaced in each year and how many remain in the system.

PUB NLH 37.0

How many of the remaining disconnects have experienced the problems described in this project?

Page B-74, Upgrade Circuit Breakers, \$315,200**PUB NLH 38.0**

How many breakers does Hydro intend to upgrade in 2008?

PUB NLH 39.0

Please provide a schedule showing the budgeted expenditure for each year of the program, the actual expenditures (including a forecast for 2007), the number of units involved in each year, and the average cost in each year.

Page B-83, Wood Pole Line Management Program, \$2,188,300**PUB NLH 40.0**

Why, for individual lines such as TL 212, does the actual number of inspections exceed significantly the target number?

Page B-89, Replace Line Camp 98 – TL-228**PUB NLH 41.0**

Please explain why there was “maintenance neglect” of this building if it is the most critical of the 15 survival buildings.

PUB NLH 42.0

Please provide a description of the condition of the other 14 survival buildings.

PUB NLH 43.0

How was this building in particular, as well as the other survival buildings, reported in Hydro’s process review “to match financial records with equivalent records” (Transcript, Oct. 16, 2003, p. 65/10)?

PUB NLH 44.0

Using today’s health and safety standards, what is the expected life of the proposed building?

PUB NLH 45.0

Should this replacement building be constructed, what measures will be taken to ensure that it receives adequate maintenance?

PUB NLH 46.0

Please provide an Engineering Report on the condition of the existing building including a cost benefit analysis showing a comparison of the options that have been considered for dealing with this problem.

Page B-92, Upgrade Line TL-212, \$463,700**PUB NLH 47.0**

Please provide a record of outages caused by low clearances over the period from 2002 – 2007.

PUB NLH 48.0

When was the line constructed?

PUB NLH 49.0

Did the line meet the standards of the day at the time that it was constructed?

PUB NLH 50.0

What changes, if any, have occurred since construction that have caused the line to not meet the standard clearance of 22 feet?

Page B-93, Construct Transmission Line Equipment Off-Loading Areas, \$301,800**PUB NLH 51.0**

Please provide an updated reference to this project now that Hydro has withdrawn the application for additional capital expenditures for 2007 in relation to the off ramps.

Page B-96, Replace Insulators, \$294,300**PUB NLH 52.0**

Please provide a replacement for the chart provided on page B-97 which includes the number of units replaced in each year, the average unit cost in each year, and the information for 2007F.

Page B-98, Upgrade Distribution Systems, \$2,727,300**PUB NLH 53.0**

What is the age of each of the distribution systems being upgraded?

PUB NLH 54.0

On each of those systems when were the most recent upgrades performed and at what cost?

PUB NLH 55.0

For each of the lines in question, please provide the SAIFI and SAIDI for each year from 2002 to 2007F, showing a comparison with Hydro's system average for the region.

Page B-101, Upgrade Distribution Systems, \$2,293,000**PUB NLH 56.0**

Please provide a comparison for each year from 2002 – 2007F of the total annual budget for the upgrade of distribution systems and the actual expenditures including the annual general allotment and the specifically approved projects.

Page B-103, Provide Service Extensions, \$2,158,000**PUB NLH 57.0**

Please revise the charts provided on page B-104 to include figures for 2007F.

Page B-105, Replace Poles, \$700,200**PUB NLH 58.0**

In which year did regular maintenance inspections identify the 75 poles to be replaced on the South Brook system and the 50 poles to be replaced on the Bay d'Espoir system?

Page B-109, Replace Recloser Control Panels, \$222,500**PUB NLH 59.0**

Please provide, if available, an Engineering Report that deals with the deterioration of these, and others if they have been identified, electronic recloser control panels that have experienced rusting and the options that have been considered for dealing with these panels.

Page B-112, Reconfigure Feeders, \$150,700**PUB NLH 60.0**

Please provide a detailed cost benefit analysis undertaken in considering the options that have been considered for this project.

Page B-117, Replace Diesel Units, \$334,400**PUB NLH 61.0**

Please provide a breakdown of the costs at Norman Bay of the replacement of the diesel unit and the automation of the plant.

PUB NLH 62.0

How many of the 50 forced system outages over the past five years have been caused by each of the gensets?

PUB NLH 63.0

Why will Hydro not wait until after the fifth overhaul to replace the unit at Norman Bay?

PUB NLH 64.0

How many operating hours and overhauls has Unit 567 at Cartwright experienced?

PUB NLH 65.0

Please provide a schedule showing the number of times in each year from 2002 - 2007F Unit 567 has been out of service and the length of each outage.

PUB NLH 66.0

Will Unit 567 be maintained and reused in the Hydro system after it is replaced?

PUB NLH 67.0

Are there steps that can be taken to reduce the time associated with acquiring replacement parts?

Page B-120, Diesel Plant Automation, \$516,200 (2008), \$379,200 (2009)

PUB NLH 68.0

Please provide a detailed cost benefit analysis that has been undertaken in considering the possibility of automating each of these plants.

PUB NLH 69.0

What reliability statistics have been considered in evaluating each of these projects?

Page B-122, Increase Generation Capacity, \$18,200 (2008), \$576,500 (2009)

PUB NLH 70.0

Please provide a copy of the detailed cost benefit analysis used to evaluate any options considered in dealing with the replacement of these two units and the increasing load.

Page B-125, Replace Switchgear, \$383,300 (2008), \$168,600 (2009)

PUB NLH 71.0

Please provide a summary of the maintenance information for each year from 2002 to 2007F for the current switchgear control panels.

PUB NLH 72.0

Have records been kept regarding temperature and humidity levels experienced by operating and maintenance staff? If so, please provide examples.

PUB NLH 73.0

In which year was the present configuration of equipment put in place?

Page B-128, Replace Mufflers, \$479,200

PUB NLH 74.0

Which environmental requirements make it necessary to replace the existing carbon steel exhausts?

PUB NLH 75.0

When did these requirements become effective?

PUB NLH 76.0

Please provide a schedule showing all carbon steel exhausts that have been replaced as a result of these requirements, the dates of replacement, the cost of replacement, and the scheduled replacement of any others at a future date.

**Page B-135, Construct New Office, Warehouse and Line Depot Facilities,
\$1,247,900**

PUB NLH 77.0

Has Hydro considered and included in a cost benefit study analysis the possibility of deferring this project for a year while continuing to monitor conditions and to lease office space on a monthly basis?

PUB NLH 78.0

How does Hydro intend to deal with the WHLDB and the possibility of contamination of the site? Has this possibility been considered in the cost benefit analysis?

Page B-136, Construct Bushing Storage Building, \$334,900

PUB NLH 79.0

What options were considered in evaluating this project?

PUB NLH 80.0

Please provide a detailed cost benefit analysis.

PUB NLH 81.0

What is the maximum age of the bushings that have been held in storage?

PUB NLH 82.0

How often are the bushings held in storage inspected and evaluated with regard to condition?

PUB NLH 83.0

In each year from 2002 to 2007F, how many bushings have been removed from this stock?

DATED at St. John's, Newfoundland this 31st day of August 2007.

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

Original signed by _____
Per Cheryl Blundon
Board Secretary