IN THE MATTER OF the *Public Utilities Act*, R.S.N.L., c.P-47 (the "Act"); and

IN THE MATTER OF an Application by Newfoundland and Labrador Hydro for an Order approving: (1) its 2011 capital budget pursuant to s. 41(1) of the Act; (2) its 2011 capital purchases, and construction projects in excess of \$50,000 pursuant to s. 41 (3) (a) of the Act; (3) its leases in excess of \$5,000 pursuant to s. 41 (3) (b) of the Act; and (4) its estimated contributions in aid of construction for 2011 pursuant to s. 41 (5) of the Act and for an Order pursuant to s. 78 of the Act fixing and determining its average rate base for 2009.

CONSUMER ADVOCATE'S INFORMATION REQUESTS

TO: Board of Commissioners of Public Utilities 120 Torbay Road P.O. Box 21040

St. John's, NL A1A 5B2

Attention: Ms. G. Cheryl Blundon, Board Secretary

CA-NLH-01 Re Generation Planning Issues 2010 July Update (at Tab 38)

In the Executive Summary it indicates that a decision must be taken in late 2010 to proceed with the Island Pond development in order to meet an inservice date of fall 2015. It also states that this is due to the need to complete

the RFP evaluation and subsequent Board review and have a final decision by spring 2012. Please provide a list of the steps with descriptions and timelines from and including the 2010 decision to proceed to and including the in-service date.

CA-NLH-02 Re Generation Planing Issues 2010 July Update (at Tab 38)

At p. 30 it states that the decision for sanctioning the Lower Churchill Project is scheduled for 2010. However, the report goes on to state that, "If a revised forecast indicates that a decision is required prior to the Lower Churchill Project sanctioning, a detailed study on how best to proceed will have to be prepared to ensure that the most appropriate decision can be taken in an orderly process." How does the 'detailed study' referred to fit into the steps and timelines referred to in the previous question?

CA-NLH-03 Re Generation Planning Issues 2010 July Update (at Tab 38)

As regards the "detailed study" referred to on page 30, is it anticipated that the same will be filed with the Board and interested parties prior to the making of any decision in late 2010 to proceed with the Island Pond development?

CA-NLH-04 Re 2011 Capital Plan

At page 6 the Capital Plan refers to a Project Prioritization methodology. Please provide any materials or documentation Hydro has developed so as to explain how potential projects are to be evaluated using this methodology.

CA-NLH-05 Re 2011 Capital Plan

With reference to the Project Prioritization methodology referred to at p. 6 of the 2011 Capital Plan, it states that 'information is used in the project prioritization process to compare its overall importance against competing potential projects'. Using this process, can Hydro provide a ranking of the importance of the projects put forward in the 2011 CBA?

CA-NLH-06 Re Complete Condition Assessment Phase 2 (p. B-13)

At Tab 5 in the report provided it states at p. 3, "If the plant is required to continue to operate as a base loaded thermal generation station after 2016, a more extensive and comprehensive study will be required to assess the cost of significantly extending the operating life of the systems required for stream production and usage (i.e. boilers, turbines, high energy piping and fuel systems)". In Hydro's assessment, will the plant be required to continue operating as a base loaded thermal generating station after 2016?

CA-NLH-07 Re Complete Condition Assessment Phase 2

Further to the previous question, if Hydro is not presently in a position to state whether the plant will be required to continue operating as a base loaded thermal generating station after 2016, when does Hydro expect to be in a position to make that determination?

CA-NLH-08 Re Complete Condition Assessment Phase 2

If the plant is required to continue operating as a base loaded thermal generating station after 2016, how much time and expenditure would be involved in carrying out a study to assess the cost of significantly extending the operating life of the systems for steam production and usage (i.e. boilers,

turbines, high energy piping and fuel systems).

CA-NLH-09 Re Complete Condition Assessment Phase 2

At page 4 of the report at Tab 5 it states, "The program is structured in phases to ensure that the work recommended is tailored to the expectations placed on Holyrood by the needs of the Island Interconnected System and the development plan for the Lower Churchill Project." Since embarking upon the condition assessment and life extension program in 2009, has the program been further tailored to the expectations and development plan referred to above? If so, how?

CA-NLH-10 Re Complete Condition Assessment Phase 2

At p. 5 of the report at Tab 5 it states that the Phase I study was based on the following assumptions:

Holyrood will be required to operate as a generating facility at a CF between 30 percent and 75 percent until 2016;

Holyrood will be placed in standby generation mode from 2016 until 2020; and

Holyrood will be converted to a synchronous condensing facility prior to 2016 and will operate as such beginning in 2016 and into the future.

At page 5 Hydro states that, "Level I assessment provides a rough estimate of the useful life of a power plant and makes recommendations for a more detailed investigation as part of a Level II study." In Hydro's assessment should these assumptions be revisited in light of the delay in sanctioning the Lower Churchill Project?

CA-NLH-11 Re Complete Condition Assessment Phase 2

Given that the Phase 2 Report builds upon the Phase 1 report, is it prudent to proceed with the approval of the Phase 2 Report (a) if the assumptions which underlie the Phase I report are in question? and (b) prior to a reasonable opportunity to receive and study the final Phase I report?

CA-NLH-12 Re Complete Condition Assessment Phase 2

At page 8 of the report at Tab 5 it states, "Considering the age of the plant and the increasing number of unexpected equipment failures in recent years it is justified to proceed with Phase 2 of the condition assessment and life extension program in select areas that are required for the long term. The results of this study will assist Hydro in determining what measures need to be taken to ensure Holyrood continues to operate as a reliable plant to 2016 and a synchronous condensing plant thereafter." What benefit will the Phase II report be to Hydro if in fact Holyrood needs to continue to operate as a reliable generating plant significantly beyond 2016?

CA-NLH-13 Re Complete Condition Assessment Phase 2

As regards the Project Schedule at section 5.2 of the Tab 5 Report, why is there no activity indicated between when the consulting contract is awarded in February of 2011 until site investigation and research gets underway in August?

CA-NLH-14 Re Complete Condition Assessment Phase 2

At page 84 of Tab 5, AMEC's report states that it was asked 'to exclude those items associated with the steam generation or steam turbine use.' What was

the purpose of this request?

CA-NLH-15 Re Complete Condition Assessment Phase 2

At page B3 of Tab 5, AMEC indicates that a part of the Level 2 costs pertain to "Hydrogen Storage and Supply". Will this work be required if the Board approves Hydro's Upgrade Hydrogen System at p. B-10?

CA-NLH-16 Re Complete Condition Assessment Phase 2

As per Table 2 at page 15 of Tab 5, it indicates that Hydro expects to receive the Phase 2 Final Report in December of 2011. When does Hydro anticipate moving forward with the Phase 3 work and report?

CA-NLH-17 Re Complete Condition Assessment Phase 2

Given the stated purposes of the Phase 1 and Phase 2 investigation and reports, what is the anticipated purpose and scope of any Phase 3 report?

CA-NLH-18 Re Perform Wood Pole Line Management Program (B-41)

With respect to Appendix B of the report at Tab 16, what is the basis for not scheduling the inspection of the poles in accordance with their age - i.e. inspect the oldest poles first? For instance, Appendix "B" indicates that Hydro is intending to inspect TL 260 poles of 1990 vintage in 2010 and 2011 while leaving 1966 TL 201 poles until 2012 and beyond.

CA-NLH-19 Re Perform Wood Pole Line Management Program (B-41)

In section 4.3 titled "Update of 2009 Work" of the report at Tab 16, it states that, "The program is built on the strategy of focusing on the older lines first

and working towards the newer lines. Table 3 on the next page of the report indicates that out of the Target Number of poles inspected of 2254, 648 poles were of 1990 vintage (TL 219 and TL 259) with the report going on to note that not all of the planned TL 219 poles were inspected but that, "This was deemed acceptable because of the relatively young age (20 years) of TL 219 and the minimal problems on the line." If Hydro's strategy is built on the strategy of focusing on the older poles first, why is Hydro committing such resources to poles of relatively young age?

CA-NLH-20 Re Replace Fuel Storage Facility - Postville (B-45)

Please provide a copy of the relevant Gasoline and Associated Products Regulations (GAP).

CA-NLH-21 Re Replace Fuel Storage Facility - Postville (B-45)

P. 6 of the report at Tab 18 refers to s. 27(5). Can Hydro confirm whether the U.L.C. label requirement referred to applies to tanks already in the field as s. 27(5) appears to be referring only to how new tanks which have been constructed and shop tested are to be labeled?

CA-NLH-22 Re Replace Fuel Storage Facility - Postville (B-45)

Please confirm that Hydro has not carried out actual inspections upon the existing tanks in Postville and has no direct evidence that these tanks are deteriorated (ref. P. 6 of report at Tab 6).

CA-NLH-23 Re Replace Fuel Storage Facility - Postville (B-45)

Please confirm whether Hydro has carried out permeability testing upon the

earthen dyke since the carrying out of repairs in 2007 and provide a copy of the results, if any.

CA-NLH-24 Re Replace Fuel Storage Facility - Postville (B-45)

At p. B-46 it states that Hydro is forecasting a 413,700 litre storage requirement for 2010-11 and a 513,600 litre storage requirement by the end of the 25 year forecast. Why is a 600,000 litre storage capacity being proposed?

CA-NLH-25 Re Replace Fuel Storage Facility - Postville (B-45)

At p. 6 of the report at Tab 18 it states, "... due to recent changes in U.L.C. standards, tanks can no longer be certified in the field." Please provide support for this statement.

- CA-NLH-26 Re Construct Transmission Line Equipment Off-Loading Areas (B-63)

 This is a \$791,000 project. Would it not be possible to defer the planned 2011 project for a year bearing in mind that Hydro relies upon alternate safety mechanisms when it carries out work from the generally much busier Trans Canada Highway.
- CA-NLH-27 Re Install Automated Meter Reading (Labrador City and Port Aux Choix) (p. B-75)

Please provide statistics as regards the number of meter readers Hydro had when AMR was first implemented to the projection at the end of 2011, broken down by each year.

CA-NLH-28 Re Install Automated Meter Reading (Labrador City and Port Aux Choix) (p.

B-75)

At page 8 of the report at Tab 33 it states that the new system also provides improvement in customer service <u>inter alia</u>

- more detailed energy usage information will be available to help track consumption patterns;
- more flexible billing options will be available to customers such as consolidated bills and customer selected billing.

Please elaborate on how these benefits will come about to customers.

CA-NLH-29 Re Replace Network Communications Equipment p. B-83

Which, if any, aspects of the proposed Network Upgrade Program will have benefit to the non-regulated operations of NALCOR and how have such benefits been accounted for?

CA-NLH-30 Re Replace i Series Computer and Upgrade Operating System (p. C-178)

With respect to Table 1 at p. C-178, on what basis is a cost recovery calculated in this case?

CA-NLH-31 Re Replace Peripheral Infrastructure (p. C-199)

At page C-199 it states that this project includes <u>inter alia</u> the replacement of eight ceiling mounted projectors. How old are these units and is there evidence that all of these units are experiencing such difficulty that they all require replacement at this time?

CA-NLH-32 Re Remove Safety Hazards

At page C-205 it states inter alia that there were two projects undertaken or

to be undertaken at Holyrood in the total amount of \$271,000. Who decided that these specific projects were to be approved and funded?

CA-NLH-33 Re Remove Safety Hazards

How did NLH remove safety hazards for its personnel as they arose prior to making this a project in its 2008 CBA?

CA-NLH-34 Re Upgrade Enterprise Storage Capacity (D-78)

What is the basis for the cost recovery of \$72,500?

CA-NLH-35 Re Tab H-2010 Capital Expenditures

At p. H-18 it states that the installation contract pertaining to work at Cat Arm was higher than the estimated amount of \$730,000 by approximately \$450,000. How does this cost over run affect the feasibility of this project as compared to the manner in which it was originally presented for approval?

CA-NLH-36 Re Tab H-2010 Capital Expenditures

Please provide a detailed breakdown of the \$450,000 cost increase for the Cat Arm project (see p. H-18)

CA-NLH-37 Re Replace Humidifiers in Air Handling Units (Hydro Place) p. D-93

There is no recovery shown for this project at Table 1. On what basis or in what manner are the costs of physical plant shared by the non-regulated business of NALCOR?

CA-NLH-38 Re 2011 Capital Plan

The 2011 Capital Plan does not contain any projects pertaining to Install Low Nox Burners or Upgrade Soot blowing Controls over the 2011 to 2015 period, both of which were listed in the 2010 Capital Plan as 2014 Projects. Please explain.

CA-NLH-39 Re 2011 Capital Plan

Is there any current regulatory requirement to address No x emissions?

CA-NLH-40 Re 2011 Capital Plan

As regards Holyrood soot blowing operations, has the environmental regulator imposed fines or amended Hydro's Certificate of Approval?

CA-NLH-41 Please provide a copy of Hydro's Certificate of Approval in relation to the Holyrood Generating Station.

CA-NLH-42 Re 2011 Capital Plan

Please provide a copy of the report pertaining to Hydro's diesel plants which is referred to at page 13 of the 2011 Capital Plan.

CA-NLH-43 Re Overhaul Gas Turbine (Holyrood) p. B-15

The report at Tab 6 indicates (p. 4) that the gas turbine plant will be out of service for approximately five months to complete the work under this project. What contingency plan exists in the event that Holyrood requires a black start during this period?

CA-NLH-44 Re Overhaul Gas Turbine (Holyrood) . B-15

How many times has the gas turbine plant been required to provide a black start of Holyrood?

CA-NLH-45 Re Overhaul Gas Turbine (Holyrood) p. B-15

At Tab 6, p. 6 the report states that the gas turbine plant has generated power during peak load and in emergencies. Please provide statistics as to these functions.

CA-NLH-46 Re Overhaul Gas Turbine (Holyrood) p. B-15

At Tab 6, p. 6 it states that this overhaul is expected to extend the life of this asset for an additional 15 years. What role if any will this equipment play in the event that Holyrood goes into synchronous condenser mode in 2016.

CA-NLH-47 Re Overhaul Gas Turbine (Holyrood) p. B-15

How long does the gas turbine plant need to run to carry out its black start function?

CA-NLH-48 Re Overhaul Gas Turbine (Holyrood) p. B-15

At Tab 6 of the report it indicates that each week the Holyrood gas turbine plant undergoes a 15 minute operational test to verify its availability for its black start function. Have there been any occasions over the last two years that Hydro was not able to verify its availability for black start function? If so, what was the cause of the unavailability?

CA-NLH-49 Re Upgrade Burnt Dam Access Road, Phase 2, p. B-17.

At p. B-18 it states that it takes personnel approximately two and one-half

hours to travel one way from Burnt Dam to Granite Canal, a distance of 48 kms (Tab 7, p. 1). Will the road be improved to the standard of the main road into Granite Canal from the Buchans Junction area?

- CA-NLH-50 Re Upgrade Burnt Dam Access Road, Phase 2, p. B-17.

 Is the road from Granite Canal to Burnt Dam plowed of snow in the winter?
- CA-NLH-51 Re Replace Off-Road Track Vehicles (Bishop's Falls and Fogo) p. B-53.

 The Fogo unit (#V7809) will be 18 years old and the Bishop's Falls unit (#V7895) will be 15 years old. Given the capacity of these units to function satisfactorily beyond the 12 to 15 year range noted at p. B-53 and given that the "maintenance costs for Unit No. 7895 are low" (Tab 22, p. 5) and that "the main drivers for replacement are technological issues" or technological improvements, why cannot the replacement of unit 7895 be deferred in the absence of any evidence that it requires replacement in 2011.
- CA-NLH-52 Re Replace Off-Road Track Vehicles (Bishop's Falls and Fogo) p. B-53.

 How many Off-Road Track Vehicles does Hydro own, where are they located and what are their respective ages?
- CA-NLH-53 Re Replace 69 kv SF ₆ Breaker (St. Anthony Airport) B-65.

 Are there ways Hydro can minimize the duration of diesel generation needed while breaker B1T1 is being replaced in order to reduce the budgeted cost of diesel?
- CA-NLH-54 Replace 230 kv Circuit Breaker (Sunny Side) p. B-73.

At p. B-73 it states that a complete overhaul of this breaker was done in 2000 and a complete re-lubrication was done on the breaker in 2007. How much did the complete overhaul project cost and what was the projection as to the remaining useful life of the asset with the complete overhaul?

CA-NLH-55 Replace 230 kv Circuit Breaker (Sunny Side) p. B-73.

Does the wall thickness specification referenced at p. B-73 mandate that breakers which do not meet today's thickness standard be taken out of service?

CA-NLH-56 Replace 230 kv Circuit Breaker (Sunny Side) p. B-73.

At Tab 32, p. 7 it states that "the vendor, Asea Brown Boveri, recommends replacing the breaker because of the condition of the tank. If the tank was in a better condition the breaker could be upgraded." Please provide a copy of the vendor's recommendation and please provide details as to any preventative or corrective maintenance that has been taken in relation to the tank?

CA-NLH-57 Replace 230 kv Circuit Breaker (Sunny Side) p. B-73.

Further to the previous question, what is/are the specific problem(s) with the conditions of the tank?

DATED at the City of St. John's, in the Province of Newfoundland and Labrador, this 9th day of September, 2010

CONSUMER ADVOCATE

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