

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 Approving: (i) its 2007 Capital Budget pursuant to s. 41(1) of the Act; (ii) its 2007 Capital Purchases and Construction Projects in excess of \$50,000.00 pursuant to s. 41(3)(a) of the Act; (iii) its Leases in excess of \$5,000.00 pursuant to s. 41(3)(b) of the Act; and (iv) its estimated contributions in aid of construction for 2006 pursuant to s. 41(s)(5) of the Act and for an Order pursuant to s. 78 of the Act fixing and determining its average rate base for 2005

SUBMISSION OF THE ISLAND INDUSTRIAL CUSTOMERS

INTRODUCTION

The Island Industrial Customers have significant concerns about Hydro’s proposed 2007 Capital Budget, which concerns are addressed in these written submissions to the Board.

The Island Industrial Customers are not requesting a hearing. The decision not to request a hearing was influenced in part by the time and other practical constraints arising from this Application proceeding almost concurrently with Hydro’s General Rate Application. As well, the parties did have the opportunity to participate in a Technical Conference on, *inter alia*, the Holyrood Condition Assessment, which resulted in information being made available in respect of this and other capital projects which might otherwise have only been elicited by a full hearing. The Island Industrial Customers, however, would urge against any perception that the Island Industrial Customers’ concerns and objections in relation to this Application are of any lesser degree or weight because a full hearing has not been sought.

A general concern continues to be the lack of sufficient information in Hydro's initial filing, resulting in the need for numerous Requests for Information from the Board as well as from the Island Industrial Customers. While this lack of sufficient initial information applies to most of the proposed projects, it was particularly egregious in the case of the proposed Condition Assessments for the Holyrood Generating Plant and for the Hardwoods and Stephenville Gas Turbine facilities, resulting in the Island Industrial Customers' request for a Technical Conference on these projects and in the need for further Requests for Information following that Conference. This was for the most part information that Hydro could have anticipated would be necessary to evaluate these projects, and which should have been included in the initial Application support.

As well, the Island Industrial Customers, without repeating them here, would reiterate the principles which they believe should apply to the capital budget process, as expressed in previous hearings and submissions to the Board, and in particular in the Island Industrial Customers' written submission to the Board on the 2005 Hydro Capital Budget Application.

HYDRO'S CAPITAL PROJECT SCREENING PROCESS

In response to IC-4 NLH, Hydro has reiterated the four broad evaluation criteria said to be used by Hydro to screen capital projects (IC-4 NLH, page 1, lines 12-19):

1. safety of the public and of its employees;
2. compliance with environmental regulations;
3. maintain or improve reliability and availability of an acceptable level of service to our customers; and

4. reduce costs or improve efficiencies.

Hydro further states (IC-4 NLH, page 1, lines 19-20) in respect of its capital project screening process that “Projects that meet one or more of these criteria will receive approval by Hydro.”

There is no evidence in Hydro’s response to IC-4 NLH that Hydro even attempts, by way of an approach to screening capital projects applying all four criteria in an integrated fashion, to prioritize its capital projects. Hydro’s response to IC-5 NLH makes this abundantly clear. When asked to prioritize its capital projects by postulating a \$35.0 million dollar “limit” on its capital budget, Hydro’s response is in effect to reflexively respond that all of these projects are equally necessary in 2007.

INCREASING ANNUAL CAPITAL EXPENDITURES

The \$35.0 million dollar limit postulated by IC-5 NLH is not, as Hydro’s response suggests, an arbitrarily selected number. Rather, it is close to the average actual annual capital expenditure of Hydro (\$36,768,000) over the seven year period 1999 to 2005 (reference: Section E of the 2005 Capital Budget Application and Section of this Application).

For 2007, Hydro is requesting approval of a capital budget of \$ 41,798,000. This increased level of capital expenditure over the recent experience of the period 1999-2005 is not isolated to 2007. The 2006 capital budgeted expenditure, approved by this Board in an uncontested Application (P.U. 31 (2005)), was \$42,636,000; it is now projected by Hydro to reach \$ 48,922,000 (reference: Section E of this Application). Hydro’s annual capital expenditures for the period 2006-2010 are projected to average \$ 44,584,000, a 21% increase in annual average capital expenditure over the 1999-2005 experience (and this assumes, likely incorrectly if past

experience is any guide, that the actual capital expenditures for years beyond 2007 will not exceed the current projected figures.)

The Island Industrial Customers urge the Board to consider whether there is sufficient justification for this increased level of capital expenditure by Hydro in 2007.

INDIVIDUAL PROJECTS:

Upgrade Access Road – Upper Salmon (p. B-5)

Upgrade Burnt Dam Access Road (p. B-6)

There is no evidence that there is any personal safety or environmental risk issues with respect to the condition of either of these roads.

In responses to IC-6 NLH and IC-7 NLH, Hydro concedes that there have been no reports of accidents or fuel spills on either road. At most, the condition of the Upper Salmon Access Road may be contributing to some increased maintenance and repair to Hydro vehicles; the examples given by Hydro are a broken engine oil pan, broken axle retaining bolts, and broken trailer tow bar. One is left to question regardless as to how much of this is due normal and expected wear and tear on these vehicles. In response to IC-7 NLH acknowledges there have been no reports at all of damages to vehicles due to the condition of the Burnt Dam Access Road.

Hydro's Condition Assessment report of the Upper Salmon Access Road, provided in response to IC-6, recommends, at page 4, that replacement of the road topping should be scheduled for 2007. However, the urgency that such work proceed in 2007 is considerably undermined by the same reports "Discussion", at page 3, that "*Even though the majority of road topping has been lost, the present road surface is in fair condition....Apart from causing a rough ride, this makes*

surface grading difficult and much slower than normal. With culvert maintenance and periodic grading of rougher areas (as they develop) the surface should not deteriorate any further.” The photographs provided with the report show a road whose condition is consistent with (perhaps better than) other unpaved rural roads in the province, which see greater, public use.

The case for the urgent need of an upgrade of the Burnt Dam Road in 2007 is no more compelling.

A “rough ride” and some increased difficulty in road maintenance do not make either of these projects priority expenditure items in 2007. Given that the combined cost of both of these projects approaches \$1.0 million, the Board should consider the case for deferral of these projects.

Construct Contaminated Water Treatment Pilot Plant – Holyrood (p. B-18):

In the view of the Island Industrial Customers, Hydro has failed to provide any evidence that the regulator is requiring Hydro to eliminate or reduce the presence of ammonia in its wastewater discharge. By IC-10 NLH, the Island Industrial Customers specifically requested copies of any correspondence with the regulator related to the wastewater issue. Hydro has provided no such correspondence, and points only to its Certificate of Approval, which provides no apparent direction on the ammonia discharge issue, as confirmed by Hydro’s response to IC-42 NLH.

Apparently, based on Hydro’s response to IC-10 NLH, the presence of ammonia in the discharge likely dates back to at least 1984 (when the collapse of the neutralizing tank changed the routing of wastewater streams), if not before, but has only recently been detected. One is left therefore with the understanding that the presence of ammonia (which in sufficient concentration is toxic

to fish) in the discharge for 20 years has given rise to no reported deleterious effects on fish or other sea life.

Hydro proposes to spend over a quarter of a million dollars on a pilot plant, which may or may not give rise to a presumably even more costly method of treating the wastewater on a permanent basis. Before going down this road of ever increasing expenditure, the Island Industrial Customers request that the Board consider whether in fact Hydro has demonstrated that there is in fact a deleterious environmental impact from the Holyrood wastewater discharge, and if so, whether the proposed expenditure is the reasonably necessary or prudent method to address that impact.

Supply and Installation of Bridge – TL233 at South West River (p. B-35):

Presumably, TL 233 is not the only transmission line in the Province to which Hydro does not have convenient road access, and where alternative means of access must be used. The Project Justification identifies that alternatives for regular and emergency access exist. It has not been demonstrated by Hydro that expending \$211,900 to construct a new bridge is the lowest possible cost option consistent with reliable service.

Microwave Site Refurbishing – Godaleich Hill (p. B-98):

Hydro is proposing to spend \$364,200 on a refurbishment of this site which, per Hydro's response to IC-24 NLH, may only extend its useful life for as little as 5 years. Hydro already anticipates that it will be back before this Board applying for approval of further projects for refurbishment this site; line 2, page 2 of Hydro's response to IC-24 NLH makes reference to such "future capital expenditures". The Island Industrial Customers request that the Board

consider deferral of any capital expenditure on this site until Hydro presents a project for an extension of its useful life going beyond a mere 5 – 10 years.

Holyrood Condition Assessment (p. B-14)

The Island Industrial Customers are troubled about the manner in which this project is being proposed. The Island Industrial Customers do not dispute the need for (and indeed encourage) long-range planning by Hydro with respect to power generation for the Island, by thermal and hydroelectric sources, as well as by wind generation. The Island Industrial Customers do dispute however whether a Holyrood condition assessment at a level of single-year expenditure of \$ 3.3 million (representing 8% of the proposed capital expenditure for 2007) is a necessary or prudent means of arriving at this goal, for several reasons.

- No detailed scope

The Island Industrial Customers find it very concerning that such a level of expenditure would be proposed for final approval by the Board without the preparation of a detailed scope of the proposed condition assessment. In response to PUB 159.0 NLH, Hydro acknowledges that the cost to prepare such a detailed scope would only be \$30,000, and if such a scope was to be prepared in 2007, this would only delay the condition assessment (if it were subsequently approved as presently proposed) by one year.

In response to IC 45 NLH, Hydro has produced the internal discussion paper “Plant Life Extension and Optimization”. In this discussion paper, Hydro itself identifies:

at page 9:

If thorough documentation of historical practice and current operations is to hand, some components and damage types can be evaluated with only a Level I assessment (See Paragraph 3.3.1). However, in many cases, insufficient information is available.

at page 10:

3.3.1 All practitioners of Plant Life Assessment recommend a multi-level approach in which the basic, lowest level (Level I) is preferred and the progressively higher levels (Level II and III) are used only to gather information not obtained at the lower levels.

Based on the Technical Conference, it is the understanding of the Island Industrial Customers that the proposed expenditure of \$3.3 million is based on Hydro's view that the assessment will have to be performed at Level II and Level III, but that not even a preliminary listing of which plant components should be assessed at one or the other Level has been produced.

The Island Industrial Customers are strongly of the view that it is only with the preparation of, and opportunity to scrutinize, a detailed scope of the proposed condition assessment that the Board can determine whether the \$3.3 million expenditure is a prudent and necessary one, or whether a lesser level of condition assessment and consequent expenditure would be sufficient. Per Hydro's response to PUB 154.0 NLH, a similar condition assessment study for another Canadian utility on three-unit plant was performed at the significantly lesser cost of \$2.2 million. Without a detailed scope, one cannot assess whether even this relatively lower level of expenditure is necessary for Holyrood.

- No urgency

Secondly, there is no urgency to proceed with a condition assessment of the Holyrood plant in 2007.

At the Technical Conference, there was presented information regarding Holyrood DAFOR over the period 1997 to 2006 which was said to support Hydro's view that the Holyrood plant was exhibiting an increasing failure rate. However additional information with respect to Holyrood DAFOR going back to 1979, provided in response to PUB 165 NLH and to IC 46 NLH, that the Holyrood failure rate over the ten year period 1986-1995 (average annual DAFOR 20.44 %) was significantly worse than in the ten year period 1997-2006 (average annual DAFOR – approximated from graphical representation- of 8%).

Hydro purports that it will need, commencing from the year of the Holyrood condition assessment, 8 years to identify, design, construct and commission and release for service the “replacement” for the current Holyrood plant operation. The Island Industrial Customers are extremely sceptical that such an extended timeframe would be necessary. However, even if one uses Hydro's timeline, this does not support the need for the condition assessment in 2007. Hydro's 1999 report “Prime Thermal Asset Remaining Life Assessment”, provided in response to PUB 174.0 NLH, supports the view that such an assessment can be prudently postponed for several years;

The report, at page 20, states as follows:

On this basis, the useful life of the Holyrood plant can be said to be only half expended [as of 1999] and another 20 to 25 years of economic operation can reasonably be expected. This statement is supported by the trend observed in other utilities which have older thermal plants that have operated at much higher annual load factors than Holyrood. These utilities begin to consider life assessment programs at 150,000.00 to 200,000.00 hours and begin implementation of life extension programs at 250,000.00 to 300,000.00 hours. (underlining added).

None of the three Holyrood generating units will have reached 200,000 hours operating life in 2014, let alone the 250,000 to 300,000 usually considered as the point where life extension programs are to be implemented. Holyrood's favourable DAFOR rates in the last ten years, a factor which obviously could not have been completely foreseen in 1999 given the relatively higher DAFOR rates experienced for most of the period up to 1999, gives reason to have continuing confidence that the Holyrood plant as currently configured can be prudently said to have a remaining useful life of at least up to 2019. The Island Industrial Customers would submit that the reasonably prudent implementation date for Holyrood life extension is closer to 2019 than 2014.

- The advantage to waiting

The advantage to deferral of any Holyrood condition assessment, apart from the real need for the preparation and opportunity to review the detailed scope, is that the future of Holyrood ought not to be considered in isolation. It is possible, and perhaps even likely, that there will be developments within the next 5 years with respect to the potential for a Labrador Interconnect, for the availability of natural gas, or in other areas that may significantly affect what kind of "replacement" may be needed to the current Holyrood plant operations; the nature of that replacement may come to be dictated more by these potential external developments than by the condition of the current Holyrood plant. This possibility, together with the other concerns identified above, all militate against a premature condition assessment in 2007.

Upgrade Unit No.3 Turbine/Generator (p. B-16)

There is a contradiction between Hydro's contention that it needs to be in an position to identify a Holyrood generating facility life extension plan (which may fundamentally alter the mode of

generation at this facility) so as to be able to implement it as early as 2014, and a project whose sole purpose is to extend the overhaul interval for Unit 3 from the current 6 years to 9 years. Even if, as the Island Industrial Customers have submitted above, a life extension plan for Holyrood need not be implemented until 2019 or later, the number of Unit 3 overhauls required in the intervening period will have only have been reduced by the proposed upgrade by one (the overhaul to be performed in 2019 in accordance with the current 6 year schedule) before the current usage of Unit 3 becomes subject to the implementation of a life extension plan for the facility as a whole.

The proposed upgrade is not required to address any service reliability concerns, and consideration of this project can be prudently deferred, at a savings of \$1.65 million on this capital budget.

Gas Turbine Condition Assessments – Hardwoods and Stephenville (p. B-24)

Replace Fuel Piping – Hardwoods and Stephenville (p. B-23)

The Island Industrial Customers question whether, in the long term, both or either of the Hardwoods and Stephenville facilities will be required. Hydro is (or ought to be) presently considering other generation options, given that future generation requirements have only been deferred by 2-3 years as a result of the shutdown of the Stephenville mill, according to Hydro's own assessment (reference: Hydro's response to IC-38 NLH). While the service history information provided by Hydro suggests that these facilities may be subject to increased maintenance issues due to the age of the turbines, there is little evidence to suggest that there has been any significant impact on service (reference: Hydro's response to PUB 149.0 NLH) or that

current service levels are not sustainable at least until Hydro addresses in the near-term its future generation requirements.

Given the uncertain future need for the Gas Turbine facilities, the Island Industrial Customers submit that it would be imprudent to approve the proposed \$529,000 expenditure for replacement of fuel lines for the Stephenville facility, based on conjecture about their condition (reference: Hydro's response to IC-13 NLH). The Island Industrial Customers submit that there are other means of obtaining empirical evidence about the condition of the Stephenville lines without resorting to their wholesale excavation as suggested by Hydro's response to IC-13 NLH.

All of which is respectfully submitted.

**POOLE ALTHOUSE
STEWART MCKELVEY**

A handwritten signature in black ink, appearing to read "Paul L. Coxworthy", is written over a horizontal line.

Per: Paul L. Coxworthy
Solicitors for the Island Industrial Customers

October 6, 2006