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 (1) its 2013 Capital Budget pursuant to s. 41(1) of the Act; (2) its 2013 capital purchases and construction projects in excess of $50,000.00 pursuant to s. 41(3)(a) of the Act; (3) its leases in excess of $5,000.00 pursuant to s. 41(3)(b) of the Act; and (4) its estimated contributions in aid of construction for 2013 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 2011

WRITTEN SUBMISSIONS OF THE ISLAND INDUSTRIAL CUSTOMERS

Introduction

These are the written submissions of the Industrial Customers of Newfoundland and Labrador Hydro on the Island of Newfoundland, the current customers being Corner Brook Pulp and Paper Limited, North Atlantic Refining Limited, and and Teck Resources Limited (the "Island Industrial Customers"), in relation to Hydro's 2013 Capital Budget Application.

The Island Industrial Customers submit that, apart from the necessary scrutiny of individual projects, Hydro, the Intervenors and, respectfully, the Board all must consider Hydro's overall proposed levels of capital expenditure, for 2013 and as projected by Hydro for the coming years. It is on this issue that the Island Industrial Customers commence these submissions.

Electrical Power Control Act, 1994

Hydro's Capital Budget process is governed by the *Electrical Power Control Act, 1994* (the "EPCA"). Section 3(b) of the EPCA states:

> *(b) all sources and facilities for the production, transmission and distribution of power in the province should be managed and operated in a manner*
>
> *(i) that would result in the most efficient production, transmission and distribution of power,*
>
> *(ii) that would result in consumers in the province having equitable access to an adequate supply of power,*
>
> *(iii) that would result in power being delivered to consumers in the province at the lowest possible cost consistent with reliable service,*

Section 4 of the EPCA charges this Board with the responsibility of implementing the power policy set out in section 3.

While it is unarguable that the implementation of power policy must be "consistent with reliable service", the manner of that implementation must also be balanced with the "most efficient" production, transmission and distribution of power, at the "lowest possible cost". It may be trite to say it, but each of these principles of the power policy must be given a distinct meaning, and must be balanced against each other. In short, such balancing requires the making of difficult choices.

Hydro's Proposed and Projected Capital Expenditures for 2013-2017

The Island Industrial Customers have in past Capital Budget Applications strongly expressed their concern about the unchecked growth of Hydro's capital expenditure demands. In the Island Industrial Customers' submissions in the 2009 Hydro Capital Budget Application (which

submissions were reiterated in their submissions on the 2010, 2011 and 2012 Budget Applications), the Island Industrial Customers stated:

> *In their Submissions on the 2008 Hydro Capital Budget, the Industrial Customers reviewed in detail the principles which they believe ought to be applicable to Hydro's budgeting practices, within a regulatory context. In summary, the Industrial Customers submitted then, and would reiterate in these present Submissions, that the Board's function must be to act as a governor on Hydro's level of capital expenditure. Hydro has resisted the suggestion that regulation by the Board of Hydro's capital expenditures ought to extend beyond a project-by-project examination of each annual capital budget. While such project-specific scrutiny is important, the Industrial Customers submit that the Board's review of the overall quantum of each annual capital budget, of the growth in the level of capital expenditure from year to year, and of what is being achieved by increasing capital expenditure, are also critical parts of the regulatory function. Such overall scrutiny is necessary to ensure that the legislative direction to provide electricity at the lowest possible cost consistent with reliable service is being achieved over time.*

> *The Industrial Customers note that the Board in P.U. 30 (2007), while continuing to endorse project-specific review of Hydro's Capital Budget, also acknowledged the importance of monitoring levels of capital spending. The Board sought to address, at least in part, the latter issue by requiring Hydro to file a five-year Capital Expenditure Plan. However, the Plan as filed is largely reflective of a reactive approach to issues of aging plant (primarily Holyrood) and fails to indicate how anticipated increases in level of capital expenditure will serve the goal of providing electricity at the lowest possible cost consistent with reliable service.*

> *Per Section G of the 2009 Application, annual Actual Capital Expenditures in the period 2004 - 2007 were $27.984, $33.952, $41.217, and $35.669 million, respectively. Per Section H of the 2009 Application, approved budgeted Capital Expenditures for 2008 are $52.836 million; it is noteworthy that only $42.898*

million of this expenditure was approved in the original 2008 Hydro Capital Budget Application, with the balance being the subject of supplementary applications to the Board. The final approved budgeted Capital Expenditures for 2008 of $52.836 million (which Section H confirms will be almost entirely expended) represent a nearly 50% increase over the 2007 actual capital expenditure (which was close to the annual average for the period 2004-2007).

The proposed 2009 capital budget is $47.856 million. If approved this would represent an over 30% increase over the 2007 actual capital expenditure; if the potential for supplementary applications is considered, it is not unreasonable to anticipate that Hydro may seek to incur actual capital expenditures in 2009 at the same level as 2008. The Industrial Customers believe that, before such heightened level of annual capital expenditure becomes the "new normal", there should be commensurate heightened scrutiny of what is being sought to be achieved by Hydro, in the longer term, by its overall capital program.

The concerns of the Island Industrial Customers with respect to escalating capital costs have more than come to pass in the years since the above submissions were first made.

The actual Capital Expenditures for the period 2008-2011 (at page I-1 of the present Budget Application), total Capital Expenditures previously forecast in the 2011 Capital Budget (page G-1 of the 2011 Budget Application) and in the 2012 Capital Budget (at page H-1 of the 2012 Budget Application), and the presently budgeted Capital Expenditures (at page I-1 of the present Budget Application) are presented below:

2013 Capital Budget: Schedule of Capital Expenditures 2008-2017 ACTUALS					
2008	**2009**	**2010**	**2011**		
46,246	54,152	55,553	63,116		

2011 Capital Budget: Schedule of Capital Expenditures 2006-2015 BUDGET					
2012	**2013**	**2014**	**2015**	**2016**	**2017**
70,159	65,667	60,496	64,384		

2012 Capital Budget: Schedule of Capital Expenditures 2006-2015 [sic] BUDGET					
2012	**2013**	**2014**	**2015**	**2016**	**2017**
87,862	121,369	151,686	155,237	146,973	

2013 Capital Budget: Schedule of Capital Expenditures 2006-2017 BUDGET					
2012	**2013**	**2014**	**2015**	**2016**	**2017**
87,862	66,145	111,682	135,224	136,100	153,322

While the 2013 proposed capital budget of $66,145,000 is in line with the already-significant rate of increase in capital expenditure levels in the 2008 to 2012 period, the 2013 proposed budget merely sets the scene for rapidly escalating capital budgets in coming years, which are estimated by Hydro in the present Application to dramatically increase, in one year, to $111,682,000 in 2014, and will continue to increase to an estimated $153,322,000 budget in 2017.

As acknowledged by Hydro in its response to IC-NLH-52, none of this rapidly escalating capital expenditure through to 2017 is attributable to plans to facilitate or accommodate the transmission of Muskrat Falls power, and this accelerating level of expenditure is driven by asset condition, system operating conditions and projected load growth.

The Island Industrial Customers submit that renewed and more vigorous scrutiny of Hydro's budgeting practices should not await Hydro's future Budget Applications, but should start with the present one. The alternative of taking a "wait and see" approach is to risk the loss of the opportunity for timely, efficient and comprehensive scrutiny of these rapidly increasing capital expenditures over the coming five year period.

Order No. P.U. 5 (2012) and Holyrood Capital Expenditures Overview

The need for renewed scrutiny is emphasized by Hydro's failure to comply with Order No. P.U. 5 (2012), by not providing an overview in relation to proposed capital expenditures at Holyrood, as further detailed by Newfoundland Power's submissions in the present Application. Newfoundland Power, in its submissions, proposes only that the Board should order Hydro to comply with this requirement in the filing of its 2014 Capital Budget Application. However, the Board's Order, in P.U. 5 (2012), was for Hydro's filing of such an overview in the present 2013 Application. Hydro's failure to comply with the Board's Order in respect of the 2013 Application has consequences both for the efficiency and costs of the parties' participation in this regulatory process. The Island Industrial Customers submit that there should be a remedy ordered by the Board for the Hydro's failure to comply with P.U. 5 (2012), rather than simply passively excuse such non-compliance by allowing Hydro to belatedly address that failure by its 2014 Budget filing.

Moreover, in the absence of Hydro's filing such an overview for the purposes of the 2013 Capital Budget Application, the Island Industrial Customers would submit that the Board should exercise even greater scrutiny and diligence with respect to whether the Holyrood projects proposed in this Application are reasonably justified and supported by Hydro's submissions and responses to Requests for Information.

The Island Industrial Customers have noted that Hydro, one day prior to the due date for these submissions, has advised the Board and the parties that four Holyrood projects proposed by the present Application are being withdrawn. Hydro states that this withdrawal was due to refinements and changes in the anticipated deployment of Holyrood with the sanctioning of the Muskrat Falls project. The Island Industrial Customers had already posed extensive Requests for Information, and prepared detailed submissions (which have been retained in this Submission), regarding three of these withdrawn projects. It is reasonable to suggest that, if Hydro had complied with P.U. 5 (2012) and turned its mind to a Holyrood Capital Expenditures overview, the questionable need for these withdrawn projects might have been earlier identified.

Costs of this Application for the Island Industrial Customers

In the context of the present Capital Budget Application, it is submitted that there should be an award of costs in favour of the Island Industrial Customers, on the same or similar basis on which the Consumer Advocate's costs are dealt with in the Hydro capital budget process. There are a number of aspects of the present Capital Budget Application which in the view of the Island Industrial Customers strongly militate towards there being such an award of costs:

(1) The failure of Hydro to comply with P.U. 5 (2012), with respect to the filing of an overview in relation to proposed capital expenditures for Holyrood;

(2) The late withdrawal of the four Holyrood projects;

(3) The need to file extensive requests for information to clarify the extent and basis of a very fundamental change in Hydro's manner of proposing annual capital expenditure, by its proposed inclusion of Front End Engineering Design (FEED) costs in the present Application; and

(4) It is neither fair to the Island Industrial Customers, nor to the Consumer Advocate, to assume that the Consumer Advocate can represent the interests of all of Hydro's rate payers, in all circumstances, from every needed perspective. In this regard, it is also to be noted that there can be significant differences between the positions advocated by the Island Industrial Customers and by the Consumer Advocate, most recently in relation to the disposition of the RSP surplus. Given the very important issues raised by the present Application, the Island Industrial Customers would respectfully submit that their intervention and participation in this Application is necessary to the Board's implementation of the power policy of the Province, and that that necessity should be reflected in an appropriate award of costs.

Front End Engineering Design Costs (FEED)

The Island Industrial Customers made extensive Requests for Information (IC-NLH-3, IC-NLH-4, IC-NLH-5) to elicit information and clarification about the nature of the FEED costs sought by Hydro by this Application.

The Island Industrial Customers have had the benefit of the opportunity to review the submissions of Newfoundland Power on this issue. The Island Industrial Customers agree with Newfoundland Power that the Board's approval of FEED costs in advance of the Board's opportunity to consider the projects in respect of which those FEED costs are being expended is not conducive to regulatory transparency, and adopt Newfoundland Power's submissions in this regard.

The Island Industrial Customers submit that approval of FEED costs, for capital projects which have not been submitted and approved by the Board, should be denied by the Board.

Individual 2013 Capital Budget Projects

The Island Industrial Customers comment below on some of the individual projects proposed by Hydro's Application. The Island Industrial Customers would note that the fact that they have not passed comment on a particular project does not necessarily indicate endorsement of the project. The Island Industrial Customers anticipate, based on past experience, that the Board and the other Intervenors will exercise their own due scrutiny of the Application, informed by their respective perspectives and mandates.

Upgrade Governor Controls on Units 1 and 2 – Holyrood, p. C-8 (WITHDRAWN BY HYDRO)

In light of Hydro's failure to file an overview in relation to proposed capital expenditures at Holyrood, the Island Industrial Customers submit that this project should be subject to close scrutiny.

The turbine controller proposed to be upgraded by this project will not be needed after Holyrood is fully converted to synchronous condenser load, as the turbine will then no longer be in service. (IC-NLH-19).

Hydro's operating experience with the existing Mark V turbine controller for Units 1 and 2 has been unremarkable since installation, in 2003 (for Unit 1) and 1999 (for Unit 2). Hydro specifically states that the existing Mark V turbine controllers have performed well, and that reliability performance is not a basis for this project. Hydro's only justification for this project is that parts and full support from the manufacturer may not be available after 2004. (See Volume 1, Tab 3, page 6, Hydro's Application).

The Project Schedule provides, assuming a January 2013 start date, that it will not be completed until December 2013. (See Volume 1, Tab 3, page 12, Hydro's Application). As a

result, after only two years, this capital expenditure will have been made with respect to turbines which will have only limited use within three years of completion of the project (2017) and no use within six years of completion of the project (2020).

The proposed expenditure is considerable, $1.455 million. The Island Industrial Customers submit that there are alternatives to approving this capital project as submitted, which I have not been investigated by Hydro, and which likely would be more consistent with reliable service at the least cost to Hydro's customers.

In response to IC-NLH-15, Hydro acknowledges that the replacement of the controller for just one of the units would make available additional spares for the remaining existing controller. Moreover, Hydro has not made any inquiries with respect to other potential available sources for spare parts (IC-NLH-18).

The correspondence from GE Industrial Systems in relation to the End-of-Production of the Mark V turbine control dates from September 9, 2003, and indicates that the Mark V "*will be supported by renewal parts and technical support for ten years* [apparently from the ceasing of normal production on March 31, 2004], *or as long as feasible*. *The length of time for continued support after obsolescence is dependent upon numerous items, including supply parts and components, design automation tools, test equipment, technical expertise, and manufacturing facility. A product end-of-life team reviews the status of each product annually to determine its current status and future plans for continued support*". A "*Typical Renewal Parts Life Cycle Model*" table included with the September 9, 2003 correspondence from GE suggests the possibility of a support option into 2019. (See Volume 1, tab 3, Appendix A, pages A6-A7, Hydro's Application).

It does not appear from Hydro's submission that Hydro has made any specific recent inquiry of GE as to what continuing support may be available for the Mark V after 2014.

Hydro suggests that as new instrumentation technologists are hired by Hydro, their proper training will be dependent on GE providing the appropriate Mark V training courses in the future, as demand for such training may be reduced (IC-NLH-17). However, the future period which needs to be bridged is no more than 2014-2020. It is not clear why Hydro's own current instrumentation technologists could not themselves provide the necessary training to new hires. Nor is it clear that GE will not necessarily provide such training support in the future.

Hydro ranks this project as number thirty-two out of forty-four projects. With reference to Hydro's response to IC-NLH-7, this project is only accorded a "medium" priority (which is the lowest ranking which Hydro allocates to any of the projects proposed in this capital budget).

Given the reliability of performance of the existing Mark V controllers over the last ten plus years, and the lack of compelling evidence that there will not be adequate support for the Mark V to bridge the continuing use of these controllers from 2014 to 2020, the Island Industrial Customers submit that this project is not sufficiently supported at this time, and should not be approved.

Complete Condition Assessment Phase 2 (Year 2) – Holyrood, p. C-12

This is another example of a very substantial proposed capital expenditure ($1.170 million) which will have limited utility after the conversion to synchronous condenser load in 2017 (IC-NLH-20). Moreover, with reference to the response to IC-NLH-21, while Hydro posits the possibility of supplemental capital budget proposals arising from the Phase 2 assessment before 2015, the Island Industrial Customers believe it would be prudent to consider that at least some such projects might not be applied for, let alone completed, until after 2015, further

limiting the likely relevance of this condition assessment in light of the impending conversion of Holyrood to synchronous condenser load.

What is also troubling is that this expensive project is being proposed in the absence of a comprehensive overview in relation to proposed capital expenditures at Holyrood as was supposed to have been filed as part of the 2013 Application pursuant to P.U. 5 (2012).

In light of the above, the Island Industrial Customers submit that any consideration of this project should be postponed until such time as Hydro is in compliance with P.U. 5 (2012) by submitting a comprehensive overview in relation to proposed capital expenditures at Holyrood.

Install Backup System for Raw Water Supply and Clarifier - Holyrood, p. C-16

This is yet a further example of a very significant proposed capital expenditure ($0.955 million), the benefits from which will be significantly diminished by 2017 (IC-NLH-26).

In the interim period leading up 2017, the asserted benefit of this project must be weighed against (a) the small risk of a failure of the water supper supply (apparently there has only been one such failure in the past, sixteen years ago in 1996, which was apparently able to be managed without dire consequences for power generation – see IC-NLH-24) and (b) the fact that Hydro has not inquired into means of further mitigating the risk, by investigating technologies that would facilitate and expedite Hydro's location of the site of a pipe failure.

The Island Industrial Customers submit that this project is not sufficiently supported, and should be denied.

Upgrade Vibration Monitoring Equipment – Holyrood, p. C-20 (WITHDRAWN BY HYDRO)

This project is ranked at thirty, out of forty-four, by Hydro, and with reference to Hydro's response to IC-NLH-7, is accorded only a "medium" priority. The system in question is still in

Phase 4 of its life cycle, which provides that components can still be repaired or exchanged with the manufacturer. Hydro acknowledges that this system has performed well to date (Volume 1, pages C-20 and C-21, Hydro's Application). Phase 4 has been in effect since January 2011, and, as at the date of Hydro's report in support of this project (May 3, 2012), no specific date had yet been set for Phase 5 or obsolescence. (Volume 2, Tab 9, page 10, Hydro's Application).

Moreover, Hydro has not obtained a cost estimate for an alternative system from another supplier. Hydro states that other options and vendors will be evaluated during the project planning stage. (IC-NLH-31).

The Island Industrial Customers submit that a capital expenditure of this magnitude ($0.519 million) should, unless urgent, be subjected to the due diligence of Hydro's obtaining a cost estimate for reasonable alternatives. The Island Industrial Customers submit that until such time as Hydro provides the requested cost estimate from the alternative supplier that any consideration of this project should be postponed.

Wood Pole Line Management Program – Various Sites, p. C-45

Given the millions of dollars of expenditure approved for this ongoing program since 2005, and the proposed renewal (and increase) of such level of expenditure for the coming ten years, Hydro's lack of progress in refining its techniques for collecting data, and in refining its analysis of the data, arising from the Program is surprising and of significant concern.

In response to IC-NLH-55, Hydro elaborates on the "very weak" correlation between non-destructive evaluation (NDE) techniques and full scale test data. Hydro has been aware, apparently for some time, about deficiencies in its POLETEST equipment and data, but a potential solution to this problem is said by Hydro to be at least five years away before it is ready for use in the field. (IC-NLH-55, page 3 of 4).

A review of the outage statistics provided in response to IC-NLH-56 shows that annual outage hours for structure failures (apparently inclusive of pole damage or pole failure) has been at 26 hours or less since 1999 (with the exception of 45.62 hours in 2005), several years before the inception of the Program.

Hydro will no doubt point to the fact that since 2005 the structure failure outage hours have been reduced to 0 (except in 2011, when they were at 20.50 hours). However, it is important to note that of the thirty-six transmission lines identified by Hydro's response to IC-NLH-56, twenty-five of them have never had a recorded outage due to structure failures (either before or after 2005). Of the eleven transmission lines that have had recorded outages due to structure failures, five of these lines, clustered on the Avalon Peninsula and the Great Northern Peninsula (TL201, TL203, TL220, TL227 and TL239), account for 755.9 hours of the 864.19 hours recorded as attributable to structure failures for the period 1993-2011, or 87.5% of the outage hours. Indeed, 12 of the 20.5 outage hours recorded due to structure failures in the anomalous year 2011 were on line TL227 (and the rest on another line located on the Great Northern Peninsula, TL260).

In the view of the Island Industrial Customers, these statistics support the view expressed by them in previous applications in relation to this Program that a more targeted and focused approach on those transmission lines, which due to environmental factors or other factors, are manifestly more prone and susceptible to structure failures, would be an eminently more cost effective means of Hydro ensuring reliable service than this Program, as presently conceived and implemented.

Per Hydro's response to IC-NLH-7, this Program is only assigned a "medium" priority ranking.

The Island Industrial Customers again submit that it would be appropriate for the Board to order a pause in this Program, before another ten year inspection cycle (at cost of millions of dollars per year) is embarked upon. This pause could be used by Hydro to focus upon and remedy the problems with its NDE testing and analysis, and to consider how a more focused approach on transmission lines which are known, historically, to be susceptible to structural failures could be developed.

Install Cold Reheat Condensate Drains and High Pressure Heater Trip Level Unit 3 – Holyrood, p. D-2 (WITHDRAWN BY HYDRO)

Hydro's response to IC-NLH-31 identifies that this project, as previously completed in respect of Unit 1 and Unit 2, was subject to gross cost overruns, particularly in respect of costs of Material and in relation to the Construction Contract. Hydro, at page 4 of its response to IC-NLH-39 proposes that it will be able to minimize cost overruns by aligning its budget for the Unit 3 project with the actual costs incurred in relation to Unit 1 and Unit 2 and by completing the Unit 3 project over two years, therefore allowing more time to put forward detailed design work.

While the actual amounts involved in this project are a relatively small component of Hydro's overall capital budget application, the Island Industrial Customers are concerned about the underlying questions raised about Hydro's cost control procedures. The Island Industrial Customers submit that if the Unit 3 work is approved, it should be subject to Hydro filing a report, upon completion of the project, identifying budget costs and actual costs, and explain the reasons for any material differentials between the two, so that the degree of success of Hydro's proposal to minimize cost overruns can be tested and verified.

Replace Automatic Transfer Switches Hind's Lake, p. D-51

Hydro, at pages D51-D55 of its Capital Budget Application, seeks approval for the replacement of two (2) automatic transfer switches located at the Hind's Lake Hydroelectric Generating Station ("Hind's Lake").

The automatic transfer switch is an automated switch which transfers the supply of power from the normal supply to a secondary supply when the normal supply is unavailable. As justification for the project, Hydro states that the failure of an automatic transfer switch at Hind's Lake "would remove automatic access to backup power" and would require a "manual intervention" by staff to transfer essential systems to a backup power supply.

Though Hydro asserts that there are typically one (1) to two (2) failures per year due to the automatic transfer switches, there are largely unrecorded as operating personnel at Hind's Lake simply "manually operate a breaker inside the transfer switch cabinet shortly after failure" and therefore no Work Order is completed (reference Hydro's Response to CA-NLH-43).

As is evidenced at page D-52 of the Capital Budget Application and the Responses to CA-NLH-47 and CA-NLH-48, five (5) recorded failures of transfer switches have been cited at Hind's Lake since 2003 requiring the expenditure of approximately Five Hundred Dollars ($500.00) in repairs since October, 2005 with little (or no) documented loss of generating capability experienced.

Though operator safety is cited by Hydro as the "key drive for this project" (Reference: Response to CA-NLH-49), this project is only ranked 42nd in the 2013 Capital Budget Project Prioritization List (Appendix "A" of Capital Projects Overview) and is given a "medium" priority ranking by Hydro in Response to IC-NLH-7, page 3 of 3.

As such, the Island Industrial Consumers submit that this project, with a budgeted capital expenditure of $314,700 to remedy risks which are limited in time, extent and costs, under the guise of operator safety, is not reasonably justified and should not be approved by the Board at this time.

Upgrade Public Safety Around Dams and Waterways – Bay D'Espoir, p. D-56

$145,000 of the proposed expenditure on this project is for three safety booms. In the Project Description, Hydro states that "this increased presence by the public has lead to incidents at dams, the most notable occurring at an Ontario Power Generation Facility in 2002 in which two people drowned and seven more were injured during release of water from one of their reservoirs". However, Hydro has not identified either any increased presence of the public in the vicinity of its Bay D'Espoir facility nor any incidents of concern at that facility with respect to public safety.

The risk assessment in relation to the proposed installation of booms is related to "the potential for boats to travel from Bay D'Espoir up to the power houses without encountering a barrier or any effective public safety signage" (Volume 1, page D-64, paragraph 4.2.2.1; pages D-68, D-69 and D-74).

Hydro's dam facility at Bay D'Espoir has been in existence for over forty years, apparently without any incident of concern related to "the potential for boats to travel from Bay D'Espoir up to the power houses". The Bay D'Espoir area is relatively isolated from the rest of the Province, and there is no evidence provided by Hydro that watercraft are used in the area by any members of the public other than those residing in Bay D'Espoir (and who have been well aware of the existence of the dam for the last forty years) or persons who would likely be accompanied by residents of the area. The Island Industrial Customers would submit that there

is no reason to expect that these members of the public will suddenly abandon the common sense which they have evidently exercised in relation to the dam facility in the last forty years.

The Island Industrial Customers submit that this Project is not justified in respect of the proposed safety boom expenditures, and that this portion of the proposed capital expenditure should be denied.

Replace Auto Greasing Systems Units 1 and 3 (Bay D' Espoir), p. D-116

Hydro, at pages D-116 to D-122 of its Capital Budget Application, seeks approval of a project to replace the auto greasing systems on Units 1 and 3 at the Bay d' Espoir Hydroelectric Generating Station (Bay d' Espoir).

This project, ranked as priority number 28 in the 2013 Capital Budget Project Prioritization List and given a "medium" priority rating by Hydro in Response to IC-NLH-7, has a budgeted capital expenditure of $260,100.

Hydro contends that the consequences of not updating auto greasing systems, installed in the 1960's with five (5) modifications since that time, is the possible loss of control of a unit.

This however has an admitted "very low" probability (reference page D-119) and, despite problems over the years, only one outage (Unit 3 for 7 hours, 30 minutes) resulting from a fault with one (1) unit is documented by Hydro in its filings to date.

Hydro contends that maintaining the status quo is not a viable option as the system has "original components installed in the mid-sixties and is now at the end of its service life" (its expected service life being fifty (50) years as noted at page D-121).

Given the low priority allocated to the Project, the apparent reliability of the system (as evidenced by only one (1) documented outage since the mid-sixties), the fact that the system

has arguably not yet reached the end of its serviced life (a mid-sixties installation with a "estimated" fifty (50) year service life), the Island Industrial Consumers submit that Hydro has failed to demonstrate that this project is reasonably required for Hydro to meet its obligation to provide a reasonably safe and adequate least cost service to the customers it supplies.

Install Online Vibration Monitoring System – Corner Brook Frequency Converter, p. D-161

Hydro proposes this project for the installation of a vibration monitoring system at the Corner Brook Frequency Converter. This system will provide real time vibration monitoring and diagnostics for the Converter and the capability to protect the unit through programmable alarms and trip levels. Hydro asserts that this system will also provide indication, through the communications system, to the Energy Control Center.

As a back ground, Hydro relates that prior to the Island Interconnected conversion to a 60 Hz power system, the paper mills used mainly 50 Hz power. Power to the 50 Hz equipment is supplied by the 50 Hz generators at Deer Lake, while the remaining excess 50 Hz generation is directed through the frequency converter, and converted to 60 Hz for equipment within the mill or supplied to the Island grid.

In 2008, both the 50 and 60 hertz stator were re-wedged and the 50 and 60 hertz rotor poles were re-wound. Prior to this, Hydro confirms that there were very few known problems identified with vibration.

In an attempt to remedy the vibration issues, outages were required in February/March, August and December, 2010, to correct/improve vibration issues with the Frequency Converter.

In concluding, Hydro writes the following at page D-168:

> "As a result of recent vibration issues at the corner Brook Frequency Converter, this project is necessary in order to provide continuous monitoring of the vibration

> levels on this system, and raise alarms to alert ECC personnel of possible problems with this machinery."

In response to CA-NLH-61, CA-NLH-62 and CA-NLH-63, Hydro admits that there have been no vibration issues with the unit since December, 2010 (when Siemans completed an air gap modification requiring the December, 2010, outage noted above), that all vibration levels since December, 2010, are at acceptable levels and that no vibration checks on the Converter are completed by Hydro staff (checks are completed by Corner Brook Pulp & Paper staff only upon request).

In light of the fact that the vibration issues experienced following major repairs in 2008 appear to have been remedied and that Hydro has failed to demonstrate that regular checks (by Hydro staff or Corner Brook Pulp & Paper employees) might be a more economical solution to avoid potential risks, the Island Industrial Consumers submit that Hydro has failed to provide sufficient justification for approval of project D-161 at this time and approval should be withheld by the Board.

Install Additional Washrooms – Various Sites, p. D-210

Hydro seeks approval for a multi-year program (15 years) for the installation of additional washrooms at various Hydro site facilities.

This project, with a projected budget of $250,190 in 2013 (and $1,319,000 over the life of the project), is ranked number one (1) in the 2013 Capital Budget Project Prioritization List as it is contended by Hydro that the project is necessary to meet Occupational Health and Safety regulatory requirements and current industry standards.

In response to NP-NLH-001, Hydro views the project as "mandatory".

At page 3, section 3.2 of Newfoundland Power's Brief of Argument filed with the Board on or about October 3rd, 2012, Newfoundland Power outlined its submissions in support of its request that approval of this project be withheld.

The Island Industrial Consumers, having reviewed Newfoundland Power's submission, the Legislative framework in which Hydro is operating and the evidence provided by Hydro to date, endorse Newfoundland Power's position and respectfully request that approval of this project be withheld pending further clarification/evidence from Hydro on the need to install additional washroom facilities to ensure the proposed expenditures are required to provide reasonably safe and adequate least cost services to its customers.

Replace Personal Computers – Various Sites, p. D-234

Hydro requests approval for this project to enable Hydro to replace 229 personal computers deployed in 2008 and 2009 which Hydro asserts are approaching the end of their useful life (D-235).

Though the Island Industrial Customers do not object to an appropriate program of computer replacement/retirement, Hydro's proposal is devoid of any description or detail as to how many laptops will be purchased (at a price of $1,800 versus desktops of $1,050 as noted in Hydro's response to CA-NLH-73), or to whom the more costly laptops will be issued (according to Hydro's response to CA-NLH-74, the assignment of a particular device is left to an employee's supervisor).

As such, it is the position of the Island Industrial Customers that further delineation of the number of laptops required and the employees reasonably expected to receive such laptops should be provided by Hydro, with substantiation for such assignments, prior to approval of this proposed expenditure.

Legal Survey of Primary Distribution Line Right of Way – Various Sites, p. E-113

Hydro requests approval of its continued program for the surveying of primary distribution lines in operation in the Province for the purpose of acquiring Crown Land easements thereto.

Hydro relates that the:

> "... sole purpose of those surveys is to obtain easements over Crown land to prevent other parties from getting title to the land, thereby potentially complicating maintenance of the lines."

The program, in existence since 2004, utilizes the services of independent contractors and Hydro intends to utilize such contractual services in 2013 and beyond (reference page E-114).

In response to CA-NLH-104, Hydro admits that it has not examined whether the remaining survey work (1,385 kms) could be done more efficiently and at less cost if in- house surveyors were hired to complete the work, seemingly operating on the presumption that it would not be possible to hire professional survey staff to complete the project.

In light of the extended project period (proposed to 2021), the budgeted cost of the project to that date ($1,776,700 as per Table 4 on page E116) and "higher than expected costs for surveying" experienced at times to date (as exemplified by the minimal 43 kms of distribution line surveyed in 2011 of the 180 kms anticipated to be surveyed in that year due to heightened survey costs), the Island Industrial Customers submit that Hydro cannot show that it has chosen the least cost option to achieve reasonably safe and adequate services to its customers until the option of in-house surveyors is fully canvassed and evidence of such examination is presented to the Board for its full consideration.

"Medium" Priority Projects per IC–NLH-7

The Island Industrial Customers have no interest in micro-managing, or in seeking to have the Board micro-manage, Hydro's setting of priorities for capital expenditure. However, once one gets past Hydro's priority "1" rank projects (which, if the Board is to place any reliance on Hydro's prioritization, must be expected to be given some weight) and those projects which raise particularly egregious issues in relation to Hydro's operational and risk management (some of which have been addressed in detail above), the Island Industrial Customers submit that some meaning and regulatory consequence should follow from Hydro's own choices in assigning lower rankings to the remaining projects.

The Island Industrial Customers note that approximately $10 million of the Budget originally sought to be approved is for "Medium" priority projects (per Hydro's response to IC-NLH-7). A "Medium" priority is in effect the lowest priority assigned for the purposes of considering Hydro's Budget Application, as no projects proposed by the Application have been assigned a "Low" priority. The Island Industrial Customers acknowledge that by withdrawal of some of the proposed Holyrood projects, Hydro has reduced the amount proposed to be expended on "Medium" priority projects by approximately $2 million. However, the Island Industrial Customers submit that this should not pre-empt close scrutiny of the remaining "Medium" ranked projects (such as the Wood Pole Line Management Program) to assess whether Hydro has established that they are consistent with the <u>most efficient</u> production, transmission and distribution of power, at the <u>lowest possible cost consistent with reliable service.</u>

All of which is respectfully submitted on behalf of the Island Industrial Customers.

DATED at St. John's, in the Province of Newfoundland and Labrador, this 19th day of December, 2012.

Poole Althouse / Stewart McKelvey

Solicitors for the **Island Industrial Customers**

Per: _____
Dean A. Porter

_____
Paul L. Coxworthy

TO: The Board of Commissioners of Public Utilities
Suite E210, Prince Charles Building
120 Torbay Road
P.O. Box 21040
St. John's, NL A1A 5B2

Attention: Board Secretary

TO: Newfoundland & Labrador Hydro
P.O. Box 12400
500 Columbus Drive
St. John's, NL A1B 4K7

Attention: Geoffrey P. Young,
Senior Legal Counsel

TO: Thomas Johnson, Consumer Advocate
O'Dea, Earle Law Offices
323 Duckworth Street
St. John's, NL A1C 5X4

TO: Newfoundland Power Inc.
P.O. Box 8910
55 Kenmount Road
St. John's, NL A1B 3P6

Attention: Gerard Hayes,
Senior Legal Counsel