The Board of Commissioners of Public Utilities Prince Charles Building 120 Torbay Road P.O. Box 21040 St. John's, Newfoundland & Labrador A1A 5B2

Attention: Ms. G. Cheryl Blundon

Director Corporate Services and Board Secretary

Dear Ms. Blundon:

Re: Newfoundland & Labrador Hydro's 2005 Capital Budget Application

Enclosed please find the original plus eight (8) copies of Newfoundland and Labrador Hydro's Final Argument on the 2005 Capital Budget Application.

Yours truly,

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MPG/jc

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NEWFOUNDLAND AND LABRADOR HYDRO

2005 CAPITAL BUDGET

Final Argument





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INTRODUCTION

On August 10, 2004, Newfoundland and Labrador Hydro ("Hydro") submitted an application (the "Application") to the Board of Commissioners of Public Utilities (the "Board") seeking approval of its proposed 2005 capital budget of \$42,431,000, as required by section 41 of the *Public Utilities Act* (the "Act"), and asking that the Board fix its average rate base for 2003 at \$1,422,412,000, pursuant to section 78 of the Act.

There are a number of specific legislative provisions which the Board must take into account in reviewing Hydro's 2005 capital budget as follows:

- (1) Section 37(1) of the Act which imposes a statutory obligation on Hydro to provide "service and facilities which are reasonably safe and adequate and just and reasonable".
- (2) Section 3(b) of *The Electrical Power Control Act*, 1994, which states that it is the policy of the Province that sources and facilities for the production, transmission and distribution of power in the Province should be managed and operated in a manner that results, among other things in, (i) the most efficient production, transmission and distribution of power; (ii) consumers in the Province having equitable access to an adequate supply of power; and (iii) power being delivered to consumers at the lowest possible cost, consistent with reliable service.
- (3) Section 41 of the Act which requires Hydro to submit an annual capital budget to the Board for approval not later than December 15 in each year for the next calendar year. Subsection (3) of this section further provides that Hydro cannot proceed with the construction, purchase or lease of improvements or additions to property, without the prior approval of the

Board, where the cost of the construction or purchase is in excess of \$50,000 or where the cost of a lease is in excess of \$5,000 in a year.

In reviewing the Application on the proposed 2005 capital budget, the Board must be guided by these statutory provisions which include consideration that (1) Hydro's service and facilities must be reasonably safe and adequate, (2) Hydro's facilities are managed in a way to produce the most efficient production, transmission and distribution of power and energy and (3) Hydro's facilities are managed in a way that results in power being delivered to customers at the lowest possible cost, consistent with reliable service.

Hydro has also requested in its Application that its 2003 average rate base be fixed by the Board in this proceeding. Section 78 of the Act states that the Board may fix and determine a rate base for each kind of service provided or supplied by a public utility. Hydro's 2002 average rate was fixed by the Board in Order No. P.U. 14 (2004) (page 158, section 30).

There are a number of factors related to the nature of Hydro's system that Hydro submits the Board must also take into consideration in reviewing the proposed 2005 capital budget. The evidence is clear that Hydro is the main generator and transmitter of electrical power and energy for the Province of Newfoundland and Labrador. Hydro produces in excess of 80% of the electricity supply on the Island. Mr. Haynes described the generation facilities which Hydro owns and operates (Pre-filed evidence, ps. 1 - 2 and Transcript, October 7, 2004, ps. 105 - 106). Hydro also operates the bulk, interconnected transmission grid for the Island portion of the Province (Pre-filed Transmission and Rural Operations ("TRO") evidence p. 1 and Transcript, October 6, 2004, ps. 39 - 41). As the primary generator and transmission grid operator for the Province, Hydro provides an essential service to all its customers and in fact, all residents in Newfoundland and Labrador. Hydro is not like a retailer of a product where, if the product is unavailable, the customer may turn to a competitor to obtain the

product. As the principal provider of generation and transmission in the Province, Hydro must adequately maintain its facilities to ensure that they are available to provide this essential service. It is Hydro's submission that its role as the primary provider of an essential service is a critical factor the Board must consider when reviewing Hydro's proposed 2005 capital budget.

Other factors relating to the nature of Hydro's system that are relevant in reviewing capital expenditures include the criticality of a number of Hydro's facilities and the age of the facilities. As pointed out by the Vice-President of Production, J. Haynes, a number of Hydro's generation facilities have been inservice for 25 years or more (Pre-filed Production evidence p. 2 and Transcript October 7, 2004, p. 106 lines 17 - 20). The Vice-President of TRO, F. Martin also indicated that one of the biggest issues for Hydro and the Board is Hydro's aging facilities (Transcript October 6, 2004, p. 38, lines 12 - 18 and p. 43, lines 11 - 25 and p. 44 lines 1 - 6).

The final factor related to the nature of Hydro's system that is relevant is its operating environment. On the Island Hydro operates various types of generation facilities including a complex thermal plant, three gas turbines and several very large and small hydro plants, as well as transmission lines (some of which traverse very remote areas) and isolated diesel plants, all in a physical environment which is often very challenging. This overall operating environment, combined with the aging nature of Hydro's facilities, brings with it challenges from a capital budget perspective which are very relevant factors for both Hydro, the Board and all electricity users in the Province. Necessary and essential capital projects to maintain the system must be reviewed with knowledge of these issues, while also taking into account the implications of the cost of capital projects on the ultimate rates that consumers pay.

Hydro submits that in reviewing its Application for approval of its proposed 2005 capital budget, the Board must take into consideration the following factors:

- (1) The relevant legislative provisions outlined above, which include that Hydro must provide power at the lowest possible cost consistent with reliable service. This balancing of costs and reliability is one of the significant challenges facing Hydro, the Board and Hydro's customers. Hydro submits that the issue of costs cannot be considered in isolation of the issue of reliable service.
- (2) The nature of Hydro's operations, which is that it is the principal generator and transmitter for the Province of Newfoundland and Labrador and provides an essential service not available from others.
- (3) The aging, complex nature of Hydro's facilities poses unique challenges, as does the harsh physical operating environment in which Hydro operates, all of which are relevant when considering capital projects.

It is also relevant for the Board to reflect in its review of the proposed budget on the comments made by the Newfoundland Court of Appeal in the stated case Re Newfoundland Board of Commissioners of Public Utilities. In that case the Court made a number of observations and comments with respect to the Board's jurisdiction to review operating expenses which are equally applicable with respect to capital expenditures. At paragraph 118 of the decision, the Court stated that the Board was not the manager of the utility and should not, as a general rule, substitute its judgment on managerial and business issues for that of the officers of the enterprise. Further, at paragraph 120, the Court stated that there would normally be a presumption of managerial good faith and latitude given to management in their decisions with respect to expenditures. These comments reflect the general principle that the Board should not micro-manage or, in fact manage, the utility at all. The responsibility for the management of Hydro rests with the officers of the company. The Board is responsible for reviewing the proposed 2005 capital budget which has been prepared by Hydro, based upon the exercise of professional and expert judgment by Hydro staff and

taking into account the extensive experience Hydro has gained in operating the facilities. The Board must avoid substituting its opinion for those of the management of the company on issues which are really within the expertise of management.

HYDRO'S CAPITAL BUDGET PROCESS

A number of general comments were made by the Industrial Customers on the capital budget process on ps. 1 - 6 of their Final Agreement which are dealt with in this Section.

The capital budget process followed by Hydro was described in detail in the Pre-filed evidence (Finance, ps. 2 – 4, Production, ps. 3 – 5 and TRO, ps. 1 - 2), in the testimony of J. Roberts, Vice-President, Finance and Chief Financial Officer (Transcript, October 18, 2004, ps. 95 - 98) and in the evidence of F. Martin and G. Holden, the TRO panel (Transcript, October 6, 2004, ps. 46 - 49). The process is intensive with the capital requirements for each year determined by operations, engineering and management personnel. As described in the evidence, proposed capital projects are screened using four broad evaluation criteria. The first is safety. If a proposed project is required for public safety and the safety of employees, it will normally receive approval. The second is compliance with legislation and projects required to meet a legislative or regulatory requirement are also normally approved. The third criteria relates to the maintenance and improvement of reliability and availability of an acceptable level of service to customers. The fourth criteria is to reduce costs and improve efficiencies.

One issue raised in Final Argument by Industrial Customers was the guideline developed by Hydro with respect to the size of a capital budget. Hydro has adopted a general guideline to determine the amount of the capital program which is that the size of the program should not normally exceed cash flow from operations (Pre-filed Finance evidence, p. 4, lines 1 - 5, Transcript, October 18, 2004, p. 114, lines 9 - 21). Mr. Roberts explained that this is a rule of thumb or guideline only. It is not an absolute determining factor. Other factors that are relevant include the requirements of the system and what is required to be done

to maintain Hydro's critical facilities and business operations to ensure continued reliable electrical service.

In their Final Argument, the Industrial Customers, on page 6, state there has been a change in this guideline. However, as Mr. Roberts explained in his evidence, the guideline has been the same since it was introduced in Hydro several years ago. What has been affected by circumstances, however, is what is Hydro's cash flow from operations. Mr. Roberts explained that cash flow includes net income, depreciation and some other non-cash items. In 2003, Hydro had no net income, and in fact was in a loss position, so obviously the amount determined under the guideline would be less because there was no net income. Mr. Roberts also explained that in 2004 there was uncertainty with respect to net income given the 2003 General Rate Application (Transcript October 18, 2004, ps. 115 - 119). In these two years cash flow from operations was depreciation only.

It must be kept in mind that the principal factor in determining the size of the capital budget in any particular year is the requirements of the system. The guideline of cash flow from operations is only that, a guideline, not a rule. If the amount of depreciation is the only factor used to determine the size of a capital budget as suggested by the Industrial Customers, given that inflation is a constant in our economy, Hydro could not even replace existing assets let alone ever provide any service extension or improvements whatsoever.

On pages 4 to 5 of their Final Argument, the Industrial Customers make a number of statements which Hydro says are not supported by the evidence and to which Hydro takes objection including the following:

(1) That there is a tendency on the part of Hydro as it is regulated on a rate base to obtain authorization to expend further funds and to

- characterize operating expenses as capital expenses in order to apply capital funds to those expenses and free up operating funds;
- (2) That Hydro has access to unlimited funds as its ability to borrow is linked to the guarantee of the Province and that there is no market limitation on Hydro's access to funds;
- (3) That Hydro tries to expand its asset base "at the expense of its customers without any real concern that the savings associated with the deferral of capital expenditures will be lost"; and
- (4) That there is no incentive for Hydro to minimize capital expenditures.

It is Hydro's position that it submits only those capital expenditures that are required in each year to maintain its facilities and to provide an acceptable level of service. Hydro's rate base is \$1.4 billion for 2003. Its capital budgets over the past five years and 2004, included in Section E to the Application, ranged from a low of \$28.8 million in 2004 to \$47.5 million in 2001 with an average of \$37.4 million. Newfoundland Power's rate base for 2003 is approximately half of Hydro's at \$675.7 million. Its capital budgets have ranged from \$41 million to \$63 million in the same period with an average of \$52 million.

Hydro submits that, given the nature of its facilities as described above, there are capital expenditures required each and every year to ensure that its facilities are capable of providing reliable service to its customers. The size of Hydro's budgets over the years reflects the fact that in determining annual capital budgets, Hydro does take into account only those that are required for that year. We would also point out that in each and every year since 1997, Hydro has submitted its annual capital budget for approval before the Board and has provided extensive justification and evidence to support each capital budget.

In its responsibility for the ownership, operation and maintenance of its facilities, Hydro is committed to its mandate of providing least cost, reliable power

for the benefit of all people in Newfoundland and Labrador. In balancing the issue of costs and reliable service, it has struck the appropriate balance in the approval of past capital expenditures. The comments made by the Industrial Customers on pages 4 to 5 of its Final Argument noted above, do not accurately reflect Hydro's experience before the Board, the manner in which it manages and operates its facilities nor its commitment to its customers for the essential service it provides.

Hydro also takes exception to the Industrial Customers' comments that there is no market limitation in Hydro's access to funds. This simply is not correct. This issue was extensively canvassed in Hydro's 2001 and 2003 General Rate Application ("GRA") proceedings. While Hydro's debt is guaranteed by the Province, Hydro must continue to be self-supporting to avoid negatively impacting the Province's credit rating (Transcript, October 18, 2004, p. 110, lines 10 - 15). Moreover, even the Province would have a limit on market availability of funds in the broad sense to which the Industrial Customers refer.

The Industrial Customers have also raised the issue of deferral of capital projects and have suggested that all projects should be deferred where possible. While any project can be deferred, the real issue becomes the consequences of deferral. In bringing forward capital budgets for approval, often there is an exercise of professional judgment by engineering and maintenance staff with respect to what the consequences are and whether the risks associated with not proceeding are acceptable. These types of considerations are undertaken at Hydro as explained by various witnesses (Transcript, October 7, 2004, p. 83, lines 11 - 25 and October 8, 2004, p. 66, lines 5 - 25). Only when the risk of not proceeding is considered to be unacceptable are projects brought forward. Often this is not a simple black and white issue and that is why the opinions of Hydro's consultants and its internal staff, who have operated these types of facilities for many years, must be given weight.

Comments on specific projects where the Industrial Customers have suggested they be deferred are contained later in this submission. However, as a general principle, Hydro would point out that the deferral of any project comes at a cost and that is the risk of adverse consequences occurring in the near future. It is Hydro's position that when it brings forward projects, the risks of not proceeding are not acceptable to it based on its considerable experience in operating the facilities and professional judgment with respect to the appropriate timing of projects. The timing of a capital project is not something that should be interfered with by the Board without evidence to support the deferral and evidence on the consequences and the risks of deferral. The decision on the timing of a project must include consideration of the nature of the project and the facilities being affected, their relevance and criticality to Hydro's system, the operating constraints described earlier and the physical environment in which Hydro operates, as well as considering the implications of failure of the existing asset if such project is for replacement or improvement. All of these factors must be taken into account before a decision can be made on the most appropriate timing of a capital project.

The last issue raised by Industrial Customers relating to Hydro's capital budget process is whether certain expenditures are appropriately treated as capital or operating. As Mr. Roberts explained in evidence, Hydro follows generally accepted accounting principles in determining whether an expenditure is to be treated as operating or capital. The policy is that if an expenditure results in betterment, that is, an enhancement of the service potential of an asset, including but not limited to, or extension of service life, it will be capitalized (RFI IC-86 and Transcript, October 18, 2004, p. 36, lines 5-8). To assist in the administration and maintenance of accounting records Hydro has adopted a classification system based on the concept of prime assets and units of property which are meant to guide decisions as to how asset costs can be aggregated and tracked, not to determine whether an expense is capital or operating in nature. Items that have been classified as unit of property are tracked separately

and their cost aggregated under the applicable prime asset. There are assets which do not qualify as a unit of property in their own right have their costs aggregated with the related unit of property (RFI IC-86).

In following generally accepted accounting principles Hydro's professional accounting staff exercise their expertise in this determination. There has been no change in Hydro's policies and their application. These policies have been reviewed by Hydro's external financial auditors, as well as the Board's financial consultants and no issues have been raised concerning their application. Hydro has undertaken depreciation studies in 1986 and 1998, which looked at the service lives of assets and the classification of assets which affect capitalization. Another depreciation study is scheduled for 2005.

The Industrial Customers provided no evidence that Hydro's policies on capitalization do not meet accounting standards. The only evidence before the Board is that of Hydro's experts in this area that Hydro follows generally accepted accounting principles and that its practices are consistent with these principles (Transcript, October 18, 2004, ps. 160 – 162). No issue has been raised on Hydro's capitalization policies in its 2001 or 2003 GRA or in any previous capital budget hearing or by the Board's financial consultant in its reviews of Hydro.

Hydro throughout this argument, where appropriate, will comment on specific projects that the Industrial Customers submit should be operating rather than capital. In addition to the general comments provided here, this section will also address the comments of the Industrial Customers in their Final Submission under the heading "Inventory Issues" commencing on page 6 of their final argument. There the Industrial Customers state that the following projects should not be classified as capital:

- (1) Replace Instrument Transformers (\$75,000), B-42
- (2) Replace Surge Arrestors (\$68,400), B-44
- (3) Meters and Equipment (\$158,600), B-100

Hydro states that each of the items in question (that is an instrument transformer, a surge arrestor and a meter) are identifiable assets used in the supply of electrical service and the expenditures associated with them should be capitalized.

Mr. Roberts has testified that the issue of whether something is capital or operating is reviewed and decisions made in accordance with generally accepted accounting principles. No evidence was presented that would lead the Board to conclude otherwise. In the absence of any evidence that Hydro's long-standing policy with respect to capitalization is inappropriate or not applied correctly, the Board should not accept the submission of the Industrial Customers.

CAPITAL BUDGET APPROVAL PROCESS

The Board in Order No. P.U. 7 (2002-2003) set out the procedures to be used by Hydro in presenting future capital budget applications. In Order No. P.U. No. 36 (2002-2003) the Board stated that there was merit in exploring capital budget issues with the utilities and interested parties in the form of a technical conference where the issues of process and filing requirements for capital applications could be addressed. Unfortunately, the review of the capital budget process as contemplated by Order No. P.U. 36 has not yet concluded. Until such time as the Board does give new direction with respect to the capital budget process, the relevant guidelines are those set out in Order No. P.U. 7 (2002-2003).

In its Final Argument the Industrial Customers raise one issue on pages 3 to 4 related to process and projects under \$50,000. It has been Hydro's practice to group individual capital projects less than \$50,000, for example tools and equipment. Thus, each purchase of a tool or piece of equipment less than \$50,000 is grouped and a total is presented. This has been Hydro's practice before the Board in each of the capital budget hearings at which the Industrial Customers intervened. The issue of the grouping of each item under \$50,000 was not raised by the Industrial Customers in Hydro's previous capital budget applications. Moreover, this issue was not raised by the Board in Order No. P.U. 7. Hydro submits that its practice with respect to this treatment has not changed, that the Industrial Customers are not taken by surprise and that no issue has been raised by the Board in the past with respect to it.

It is Hydro's submission that the issue of each individual project under \$50,000 and how it should be grouped and reported on is an issue which, if it is to be raised at all, should be raised in the capital budget process review which has been initiated by the Board. It is Hydro's view that it would not be reasonable for the Board to now impose additional constraints or requirements

on Hydro related to this to change the long standing practice without adequate notice to Hydro.

It is Hydro's submission that if the Board wishes to change the issue of reporting each individual item under \$50,000, it should be done and implemented for future use and that it is most appropriate that this be done in the context of the capital budget process review. To do otherwise, that is, to change the rules at this point, given Hydro's past practice and the lack of direction from the Board on this, would be changing the rules without appropriate notice and would be unfair and unreasonable. The Board should not change the rules for a capital budget application midway through a capital budget hearing.

2005 CAPITAL BUDGET - GENERAL COMMENTS

Hydro's 2005 capital budget submitted for approval is \$42.4 million and is composed of four main categories: generation, transmission and rural operations, general properties and the allowance for unforeseen events.

Detailed project justifications are contained in Section B to the Application for all projects in excess of \$50,000. These detailed project justifications comply with the directions and guidelines given in Order No. P.U. 7 (2002-2003). As well, Hydro pre-filed evidence on August 10, 2004 in support of the Application, responded to 109 information requests and called seven witnesses in the hearing. No evidence was called by the Intervenors or Board Counsel with respect to any proposed capital expenditure or the capital budget process generally.

Hydro submits that the evidence supports each of the capital budgets submitted in the 2005 Application. In its Final Argument, Newfoundland Power took no exception with respect to any project and specifically stated with respect to the VHF Mobile Radio Replacement project, B-137, that the project was justified on the record before the Board. In its Final Argument the Industrial Customers, on page 7, listed a number of projects to which they took no objection or comment in addition to those detailed in the Settlement Report (Consent #1). Board Hearing Counsel filed no Final Argument and took no position on the issues before the Board.

In light of the positions taken by the parties in their Final Argument, Hydro will address only those projects to which the Industrial Customers have made objection or provided comments on.

2005 CAPITAL BUDGET - GENERATION PROJECTS

General

In their Final Argument, the Industrial Customers made objection or comment on the following generation projects:

- Upgrade Slope Stabilization Upper Salmon Power Canal (\$1,003,000), B-5;
- Upgrade Controls Spherical Valve No. 6 Bay d'Espoir (\$196,100),
 B-11;
- Replace Penstock Snook's Arm Generating Station (\$115,000),
 B-13;
- 4. Purchase Dry Ice Cleaning System (\$59,000), B-15;
- Purchase/Installation Anti-Fouling System for Cooling Water Systems
 Holyrood (\$704,500), B-19; and
- 6. Install Main Fuel Line Valve Hardwoods (\$91,000), B-24.

The project Replace Underground Fuel Tanks – Upper Salmon
Generating Facility, B-9, is not contained in the listing of the projects on page 7 of
the Industrial Customers Final Argument to which they do not make objection or
comment, nor is that project listed in the projects to which they do wish to make
objection or comment as set out on page 8. As the Industrial Customers make
no comment or objection on this specific project, Hydro assumes that they are
not objecting to it. Hydro would also point out that the Industrial Customers did
not object to the project Upgrade Standby Diesel Fuel System – Hydro Place,
B-153, which is the same in nature as that proposed for the Upper Salmon
Generating Facility. The project to replace the Underground Fuel Tanks at the
Upper Salmon Generating facility is required because these tanks do not meet
current environmental requirements, as they do not have secondary containment
or leak detection measures, nor do they have means of quantifying the amount of

fuel used for reconciliation purposes. The same rationale underlies the requirement for the underground fuel tanks for Hydro Place, B-153. Hydro submits that this project is required to meet environmental requirements and should be approved by the Board.

Upgrade Slope Stabilization - Upper Salmon Power Canal (\$1,003,000), B-5

The Industrial Customers have proposed that this project be deferred to the 2006 capital budget. Hydro does not agree that this is an appropriate project to defer.

The project justification contained in B-5 explained that there are concerns with slope instability at a section of the Upper Salmon Power Canal which is used to direct water to the Upper Salmon generating plant from Cold Spring Pond. Mr. Havnes explained in his evidence that this structure is 21 years old and that concerns exist with respect to the stability of the slope. He further explained that the Dyke Board of Consultants has recommended that the slope stability issue be immediately addressed. Mr. Haynes explained that the Dyke Board is a group of experts that are recognized internationally in dyke and hydraulic plant design (Transcript October 7, 2004, p. 138, lines 17 - 25 and p. 216, lines 15 - 25 and p. 217, lines 1- 10). This internationally recognized group of experts has visited the Upper Salmon Power Canal each year since the October 1999 report prepared by AGRA Monenco referred to by the Industrial Customers (Transcript October 7, 2004, p. 217, lines 17 - 25 and p. 218, lines 1 - 14). Mr. Haynes further testified that the Dyke Board's recommendation is that the slope stabilization work on the Upper Salmon Power Canal is "urgently required" and that it should be done in 2005 (Transcript October 7, p. 218, lines 10 - 18). Moreover, the engineering staff at Hydro in this field, who are also recognized as experts in maintenance and construction of dams and dykes, concur with the Dyke Board recommendation that it is critical to undertake the work in 2005 (Transcript October 7, 2004, p. 219, lines 3 - 17).

Should the Upper Salmon Power Canal fail, Mr. Haynes explained the consequences. The slope will slide into the Canal and there is the possibility of undermining the other bank of the canal. If a slope failure were to occur, then it would be necessary to spill water around the Upper Salmon plant which displaces approximately 850,000 barrels of oil annually. Should there be a failure at the canal, the outage of the Upper Salmon plant would be extensive and it is estimated that the outage would be from 4 to 5 months requiring additional thermal generation at Holyrood at a cost of approximately \$12.2 million (p. B-8).

What is not in dispute by the Industrial Customers is that the work needs to be done to stabilize the Upper Salmon Power Canal slope. Nor is it disputed that this is a critical structure and without it the Upper Salmon Power facility, which has a capacity of 84 MW, would be unavailable during the period of failure which would require an extensive period of time to repair. The final engineering study with respect to the specific work to be undertaken has not yet been finalized as pointed out by the Industrial Customers. This is often the case with a number of projects that are approved at the capital budget approval phase. Final detailed design and engineering occur normally after approval and can affect the capital cost estimate. Hydro regularly reports to the Board with respect to the cost of projects once approved and explains any variances.

It is Hydro's submission that this work is critical to be done in the time period proposed. The Upper Salmon Power Canal is critical to the operation of the Upper Salmon Power facility. An internationally recognized group of consultants has said that it is imperative that the work be undertaken in 2005. Hydro submits that, in these circumstances, the risk of not proceeding immediately to undertake this work, given the current condition of the dyke, is not acceptable. This project should be approved for 2005.

<u>Upgrade Controls Spherical Valve No. 6 (\$196,100), B-11</u>

The Board has previously approved the principle of the upgrade of the controls of the six systems at Bay d'Espoir Powerhouse No. 1. The specific 2005 capital project would replace the spherical valve for Unit No. 6, leaving one remaining unit to be done in 2006. As pointed out in the project justification, the control system for the valve is obsolete and unreliable. Replacement parts have to be reverse-engineered and custom-made. Should a failure occur, replacement capacity and energy, if available, would have to be obtained through increased production at Holyrood or gas turbines at a significantly higher cost. The resulting lengthy outage at Bay D'Espoir would significantly increase the risk of spill during high inflow periods.

Hydro acknowledges, as pointed out by the Industrial Customers in Final Argument, that back-up generation is available from either Holyrood or a gas turbine. However, this would be at a significant additional cost, with the cost of replacement energy from Holyrood arising from an outage of two units at Bay D'Espoir being \$184,000 per day at a fuel price of \$32.20 per barrel. The cost for gas turbine generation would be in excess of this.

The Industrial Customers also suggest that the remaining two spherical valves could be done in one year. While this is correct, as Mr. Haynes pointed out, the outage would be longer and it would be affected by the operational requirements such as the load on the system at the time and the status of the thermal plant and the longer outage time required would affect service to customers (Transcript October 7, 2004, p. 176, lines 11 - 19).

Hydro submits that it is most prudent to do these spherical valve replacements in a prudent, phased manner. As accepted by the Industrial Customers, it is necessary that these parts be replaced to ensure reliable service for Hydro's customers. Four of six have already been done with this phased

approach and Hydro submits it is appropriate to do one of the remaining two in 2005 and the remaining one in 2006, as this provides the most operational flexibility for Hydro and its customers.

Replace Penstock – Snook's Arm Generating Station (\$115,000 for 2005, \$1.8 million – 2006), B-13

The need to undertake work on the penstock in Snook's Arm is not disputed by the Industrial Customers in their Final Argument. As stated in the justification on page B-13, the penstock was constructed in 1956 and in 2006, the date scheduled for replacement, it will be 50 years old and in excess of the 40 year design life for a wooden penstock. As identified in the justification and in evidence, a number of problems have been identified with the existing penstock including the design, significant deterioration in the wooden staves, rusting in the steel bands along the penstock, serious leaking at various points along the length of the penstock, the formation of significant ice during the winter from existing leaks, concern on the integrity of the raised enclosures over the access road and penstock enclosure, concerns on the integrity of the buried section of the penstock, the deterioration of the protection coating for the penstock and the inappropriate use by residents in the community for water supply.

Hydro completed an engineering analysis to determine the most appropriate solution for these identified problems which report was filed with the Application (Tab 1, Section G). The report in Section 6, commencing at page 12, identified four alternatives which were analyzed, including do nothing, retire the Snook's Arm Plant, replace the existing penstock in its entirely and a phased replacement of the penstock. The do nothing alternative was eliminated, given the condition of the penstock, the significant damage that could occur to private property and to the community infrastructure and the potential for personal injury. The alternative of retiring the Snook's Arm Plant was found not to be cost effective. The economic analysis of both alternatives (complete replacement and phased replacement) is found on pages 15 - 16 of the report and Appendix C.

A cumulative present worth in 2004 dollars of the full replacement option is \$2,207,786 and the phased replacement was slightly higher at \$2,216,221 (Appendix C to Report). Page 8 of the report points out that the full replacement will provide the lowest overall cost to Hydro while providing an acceptable level of reliability for the production of electricity. Further the additional benefits obtained from the full replacement far outweigh the phased replacement and are set out on page 17 of the report. The benefits include elimination of the risk of failure with the consequent property damage of third parties and potential personal injury, increased reliability of the penstock, decreased energy losses, use of a renewable resource and a design life in excess of 30 years for the new penstock. It should be noted that, of course, this would also result in the lowest overall cost for Hydro's customers.

Mr. Haynes in his cross-examination also confirmed that the deteriorated condition of the penstock justifies the entire replacement and that this replacement was "the optimum thing to do" (Transcript October 7, 2004, p. 164, lines 18 - 22). Mr. Haynes stated that if Hydro were to go with the phased replacement there would still be the risk of failure of the upper portion. Hydro's recommendation is to proceed with a full replacement (Transcript October 7, p. 179, lines 17 - 25 and p. 180, line 1).

It is accepted by all the parties that work needs to be done on the wooden penstock at Snook's Arm which is in excess of its design life and which has significant problems. The engineering analysis completed by Hydro demonstrates that the advantages of full replacement outweigh the phased replacement by \$8,435 in cumulative present worth over the life of the project and replacement is the optimum solution. Hydro submits that the replacement of the penstock should be approved as proposed.

Purchase Dry Ice Cleaning System (\$58,006), B-15

The Industrial Customers in their Final Argument on pages 13 to 14 submit that this project should not be approved. They state that a fixed system has been installed in Granite Canal and that if appropriate planning had been done, a mobile system would have been acquired then. The Industrial Customers do not correctly state the facts on this project.

The system installed at Granite Canal is not a dry ice cleaning system. The response to IC-50 states that the design of the generator in Granite Canal incorporated dust collection and thus less dust gets on the windings than in older generating units (Transcript October 7, p. 219, lines 13 - 19) which is common for new units. Dust will still exist but in less quantity.

The proposed project is to purchase a dry ice cleaning system to replace the current manual system of cleaning dust from the rotors and stators of generating units and oil mist from thrust and guide bearing assemblies. The fact that a new design for generators provides an opportunity to limit the amount of dust and oil contamination at Granite Canal does not eliminate the need to clean the dust and oil mist from other generating units. As noted in the project justification, B-15, the cost to clean a unit is \$15,000 per unit and even at a minimum rate of one unit per year, the purchase provides a pay back in five years.

Hydro submits that this project should be approved as submitted.

Upgrade Control Systems - Holyrood (\$1,034,001), B-16

The Industrial Customers do not object to this project in their Final Argument (p. 14), however, they do provide comment with respect to the fact that Hydro has changed the supplier of the system from what was indicated last year. The project justification on page B-17 sets out the rationale for choosing Foxboro as the lowest cost alternative for the replacement of this system, instead of

Emerson as was thought during the 2004 capital budget hearing. For the reasons set out there, it is clear that Foxboro's proposal was the lowest cost alternative as the supplier for the distributed control system for the Holyrood Generating Plant.

It is Hydro's position that, as a capital project proceeds, its responsibility is to ensure that the lowest cost option is selected for the project. This benefits all of Hydro's customers. Mr. Haynes in his evidence explains that Hydro became aware of the ability of Foxboro to provide the distributed control system at a lower cost after the hearing last year (Transcript October 17, 2004, p. 224, lines 20 - 25, p. 25, lines 2 - 14). Mr. Haynes also confirmed that Foxboro was the lower cost solution with the lower cost to ratepayers than the Emerson proposal contemplated in 2003 (Transcript October 7, 2004, p. 249, lines 1 - 7).

Hydro's past experience with respect to capital projects is that there can be changes in the way in which a capital project is undertaken from that contemplated at the time of its approval until work actually commences. Hydro will always remain alert to lower cost opportunities in order to determine the lowest cost option for completing a project, as was the case with respect to the upgrade of the control system project for Holyrood. Hydro regularly reports to the Board on the status of various projects, including variances. The particular decision with respect to the selection of Foxboro rather than Emerson resulted in a lower overall evaluated cost option for the project which was of benefit for all parties. It is Hydro's submission that this will be an ongoing process and that, from time to time, there may well be changes in circumstances which do affect the manner in which a project may proceed. Hydro has regularly reported items such as a change in the scope of the project, or a significant change in the capital cost estimate to the Board and will continue to do so in the future.

<u>Purchase/Installation Anti-Fouling System for Cooling Water Systems – Holyrood Generation Station (\$704,500), B-19</u>

The project justification for this project, B-19, explains that mussel infestation restricts flow and reduces the efficiency of the cooling systems at Holyrood. The yearly cost associated with the lower generation capability and efficiency and the manual cleaning to remove the mussels is approximately \$185,000. The installation of the proposed anti-fouling system will eliminate these costs and will provide a payback within five years.

At page 15 of their Final Argument, the Industrial Customers dispute that there is sufficient evidence to support the anticipated efficiency gains with respect to the system.

Mr. Haynes in cross-examination explained how Hydro determined that there would be efficiencies obtained by the use of the new anti-fouling system. Mr. Haynes explained that the plant engineering and operating staff reviewed historical data for the past three to four years to determine whether efficiencies would have been obtained during that period if the anti-fouling system had been in use at that time (Transcript October 7, 2004, p. 199, lines 22 - 25 and p. 200, lines 1 - 10). Mr. Haynes also explained that the anti-fouling system is quite common in the utility environment and that while it is a newer technology, it has been used by other utilities and proven successful (Transcript October 7, 2004, p. 203, lines 24 - 25 and p. 204, lines 1 - 5). Hydro's Holyrood Thermal Plant staff contacted other utilities who have this type of system in operation as part of their analysis of the problem and it was found to have worked well (Transcript October 7, 2004, p. 204, lines 10 - 18).

Hydro submits that the evidence is clear that appropriate analysis has been done by Hydro's engineering and maintenance staff to demonstrate that the anticipated efficiencies are realistic and that this project is cost effective. Hydro submits that this project should be approved as submitted.

Install Main Fuel Line Valves - Hardwoods Gas Turbine (\$91,000), B-24

The Industrial Customers propose that this project be deferred, even though they recognize that Hydro currently is not compliant with environmental regulatory requirements (Final Argument, p. 16).

As stated in the justification in B-24, the current environmental regulations in the Province require that the operation of fuel storage and handling systems be designed to limit fuel leakage. Hydro's current fuel storage at Hardwoods does not meet this requirement. The proposed project involves the installation of two motorized valves in the main fuel pipeline between the storage tank and the fuel tank to meet this requirement. As Mr. Haynes explained this is a requirement of Hydro's certificate of approval and the regulator is aware of Hydro's non-compliance with respect to the Hardwoods Gas Turbine and the other two projects (B-9 and B-153) wherein Hydro has determined that it is non-compliant with the current regulations relating to the storage and handling of fuel oil.

Mr. Haynes testified that Hydro is working with the regulator to achieve compliance over a period of time (Transcript October 7, ps. 213 to 214, lines 22 - 25 and lines 1 - 7). Further, Mr. Haynes testified that the issues of noncompliance with respect to fuel storage tanks came to be known as a result of an environmental audit done by Hydro staff. The Department of Environment and Conservation are aware of these issues of non-compliance and are also further aware of Hydro's plans for remediation which is one of the reasons why Hydro has not been charged with violation of the current regulations (Transcript October 7, 2004, p. 247 to 248).

It is clear from the evidence before the Board that Hydro is not in compliance with legislation with respect to the fuel storage system at the Hardwoods Gas Turbine site. In order to be compliant it is necessary to complete the project contained in the 2005 capital budget application at B-24. Hydro submits that in these circumstances it is not appropriate to defer this project, as Hydro is clearly non-compliant with an existing environmental regulatory requirement. Hydro submits that the project should be approved as submitted.

2005 CAPITAL BUDGET – TRANSMISSION AND RURAL OPERATIONS ("TRO")

Under the heading of TRO, Hydro has requested approval of projects totaling \$19.8 million for 2005. The Industrial Customers have objected or commented on the following projects in this category:

- 1. Replace Wood Poles Transmission (\$2.6 million), B-28
- 2. Digital Fault Recorder Bottom Brook (\$121,500), B-35
- Install Motor Drive Mechanisms on Disconnect Switches (\$182,800), B-38
- 4. Replace Instrument Transformers (\$75,000), B-42
- 5. Replace Surge Arrestors (\$68,400), B-44
- 6. Purchase/Install Conduit and Control Cables Bay d'Espoir (\$60,700), B-46
- 7. Installation of Fall Arrest Equipment (\$206,200), B-77
- 8. Purchase Meters and Equipment TRO System (\$158,600), B-100
- 9. Install Central Air Conditioning Whitbourne and Stephenville (\$289,100), B-101
- Upgrade Line Depots/Storage Sheds Baie Verte, Sops Arm, Bay d'Espoir (\$151,000), B-103
- 11. Legal Surveys of Distribution Line Right-of-Ways (\$50,000), B-108
- 12. Purchase Mobile Oil Reclaimation Unit (\$530,900), B-110
- 13. Replace Doble F2000 Relay Test Equipment (\$362,200), B-112

The following section sets out Hydro's position on the projects to which the Industrial Customers either object or provide comments in their Final Argument:

Replace Wood Poles - Transmission (\$2,587,006), B-28

In their Final Argument on pages 16 to 19, the Industrial Customers take the position that this is a continuation of existing inspection and maintenance procedures and as such is an operating expenditure. The Industrial Customers characterize the proposed project as an operating practice and state that the only new practice introduced is the replacement of preservative chemicals. The description of the project as contained in the Industrial Customers argument is simply not correct.

As stated in the project justification, B-28, and as set out in the report on this project contained in Section G, Tab 2, of the Application, the proposed project will consist of visual inspection, non-destructive testing, destructive testing, engineering analysis to determine appropriate action (that is replacement, repair or no action) and treatment. Hydro's existing practices have consisted only of visual inspection and sounding. Under the current maintenance practices, a pole would be replaced following sounding and visual inspection if found to be defective. The intent of the current program was not to extend the life of each transmission line structure, but simply to ensure that the original life was realized. The proposed project will extend the life of the transmission lines, as opposed to maintaining the original life, by a minimum of ten years.

Mr. Martin described the proposed 2005 capital budget as the first year of an ongoing program. The evidence explained the nature of the proposed project and how it added a different approach and included a number of additional steps in the current practices (Transcript October 6, 2004, p. 63 to 68). Mr. Martin explained that the program will assist in the long term planning of the high voltage transmission network and provide a more reliable transmission system. The intent of the program is to extend the life of the high voltage transmission line by a minimum of ten years with significant reductions in costs for ratepayers (Transcript October 6, p. 68, lines 16 - 22). It is clear from the evidence filed in

the hearing that the proposed project is not simply a continuation of existing practices.

At page 17 of their Final Argument, the Industrial Customers state that life extension was the goal of Hydro's previous inspection and maintenance programs which had not been capitalized and go on to say that the goal for all maintenance practices is the extension of the service life. This is not correct and no evidence has been presented to support this statement. In fact, the evidence is to the contrary. Hydro's current practices are not aimed at extending the life but maintaining the original life of the line. The new program with its various components will extend the life of the line by a minimum of ten years and thus extend the life of the asset. Hydro's current practice of sounding, visual inspection and replacement of defective poles is only directed at maintaining the original life.

Hydro submits that the evidence filed in support of this project including the project justification at B-28, the engineering report under Tab 2, Section G and the evidence of the TRO panel during the hearing, all support the significant gains to be realized through the proposed capital project with its many components. Under generally accepted accounting principles, if a project is designed to extend and will extend the life of the asset, it is to be capitalized. It should also be noted that the Industrial Customers do not object to the work being undertaken, but it is the accounting treatment that they take exception to.

Hydro submits that the project clearly involves a number of elements to extend the life of a transmission line and, therefore, under generally accepted accounting principles it should be capitalized. Hydro submits that the budget should be approved as submitted.

<u>Digital Fault Recorder - Bottom Brook (\$121,500), B-35</u>

The project justification contained on page B-35 describes this project as the purchase and installation of a digital fault recorder at the Bottom Brook Terminal Station which currently has no fault recording equipment installed at this station. The project description also states that statistics show that more than 10% of all protection operations occurred in the Bottom Brook area and historically there has been a high number of transmission line outages in this area. The fault recorder will provide real time and historical information on equipment operation during faults which will be used in the analysis to determine if protection equipment operated correctly and in the determination of the root cause of the events and the determination of timely remedial action.

Mr. Martin in his evidence testified that most of Hydro's 230 kV transmission sites across the Island do have digital fault recorders, including the terminal stations in Bay d'Espoir, Massey Drive, Buchans and that it is a standard piece of utility equipment used by protection and performance engineers across the country. He testified that it is an invaluable tool used by utilities to analyze system disturbances (Transcript October 6, 2004, p. 101, lines 5 - 17) and allows performance engineers to shorten the time required for analysis and diagnosis, which will ultimately improve reliability of the service to customers (Transcript October 6, p. 103, lines 11 - 17).

Hydro submits that, as the Bottom Brook Terminal Station is a significant terminal station on its system and the only point of supply to the Doyles and Port aux Basques areas, it is prudent for Hydro to install a digital fault recorder at this high voltage terminal station. Hydro submits the project should be approved as submitted.

Install Motor Drive Mechanisms on Disconnect Switches (\$182,800), B-38

As stated in the project description on page B-38, 2005, is the last year of a three-year program to install motor drive mechanisms for all manual 230 kV

disconnects. This project was initiated due to workplace safety concerns. The current arrangement of the 230 kV disconnect switches is such that the operators have to stand directly under the switch to operate it which is a significant safety hazard.

In their Final Argument on page 19, the Industrial Customers refer to the fact that there have been enhanced inspections to ensure no injury occurs. Hydro states that the inspections do not lessen the safety risk associated with the manual operation of these disconnects. The safety risks remain and Hydro believes it is imperative that all 230 kV disconnects be motorized to eliminate the safety hazard. It is not acceptable to continue with a serious safety risk to Hydro's employees when the safety risk has been identified and a plan adopted to eliminate the risk. Hydro submits that the project should be approved as submitted.

Conduit and Control Cables - Bay d'Espoir (\$60,700), B-46

In their Final Argument on page 20, the Industrial Customers object to this project on two grounds: one is that the project arises from actions by Hydro employees with respect to damage to the cables and secondly that the expenditure is an operating expenditure rather than a capital expenditure. With respect to the first issue raised by Industrial Customers, Hydro states that it did explain in RFI IC-17 and in evidence (Transcript October 6, 2004, p. 117, lines 2 - 10) that the cables in question are buried cables which suffered damage when a fence was being installed by Hydro staff. These unfortunate mishaps occur from time to time. The equipment was installed back in the 70's as part of the original Bay d'Espoir development. Hydro states that it has not been demonstrated that negligence occurred with respect to the manner in which the damage occurred as stated by the Industrial Customers in their argument.

With respect to the second issue, as to whether it is an operating or capital expenditure, Hydro states that the old cable has been fully depreciated, that the

control cables proposed to be installed are new assets to be used in the supply of electrical service and that pursuant to the normal accounting principles with respect to the capitalization of assets the cables are an appropriate capital expense. The Industrial Customers did not produce any evidence to say that under generally accepted accounting principles this would not be capitalized. On the other hand Hydro has provided evidence in this area on how Hydro determines what is capitalized under accounting principles. Hydro submits that this project should be approved as submitted.

Installation of Fall Arrest Equipment (\$206,200), B-77

In their Final Argument, the Industrial Customers do not dispute that permanent installations of fall arrest equipment are required at Hydro locations and that temporary facilities are required in other locations as required by the Occupational Health and Safety Regulations. In fact at page 22 of their Final Argument, the Industrial Customers acknowledge that the 2005 capital expenditure is supported and requested the Board to order Hydro to provide substantiation of the level of expenditure per installation with respect to the future years. The Industrial Customers do not object to the proposed 2005 capital expenditure.

As explained in evidence, the issue of whether there will be permanent or temporary installations will depend on the risks associated with a particular location, the height of a structure and the frequency of access to that location. There has been analysis done by Hydro's engineering staff to determine which structures pose the greatest risk and that was used in developing the 2005 estimate (Transcript October 6, p. 218, lines 1 - 8). Hydro has prioritized the locations based upon the risk involved, the height of the structure, the frequency of access, all of which need to be addressed to ensure Hydro is compliant with the requirements for fall arrest equipment. It was clearly stated in the evidence that the amount proposed is required to be spent to address the priority sites in order for Hydro to be compliant with the legislation and to provide an appropriate

level of safety for employees and contractors (Transcript, October 6, p. 219, lines 10 - 25 and p. 220, lines 1 - 23).

As the program moves forward in subsequent years, Hydro will be providing more detailed information to the Board with respect to the expenditures in each subsequent year.

Hydro submits that the budget as presented for 2005 should be approved in order to allow Hydro to make the permanent installations required for fall arrest equipment at those locations which have been deemed to be a priority from both the height perspective, the risk associated with it and the frequency of access to the site.

Install Central Air Conditioning – Whitbourne and Stephenville (\$289,100), B-101

There have been numerous complaints from employees in both the Whitbourne and Stephenville offices relating to temperature and excessive humidity during the summer months. RFI IC-21 refers to the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) Standard #55-2004 and explains how the recorded temperatures in both the Whitbourne and Stephenville offices for the summer period exceeded this internationally recognized standard for temperature and relative humidity for human comfort in an office environment. Mr. Martin testified that the ASHRAE standard is an engineering standard used by engineers and others, including architects, in the design of office facilities (Transcript October 7, p. 17, lines 13 - 25). While the ASHRAE standard is not a regulatory requirement, it is certainly an accepted standard used by engineers and architects in the design of office space.

All of Hydro's significant offices have air conditioning systems except Whitbourne and Stephenville. These two sites are area offices where staff work on a daily basis for their regular work sites, as well as being the central point for

larger groups including line crews, trades people, etc. for safety meetings, group supervisory meetings, etc. Both facilities are used by numerous people on a daily basis (Transcript October 7, p. 20, lines 8 - 15).

The response to IC-21 demonstrates that the conditions existing in both offices significantly exceed the design criteria set by ASHRAE which in Hydro's submission "do not constitute occasional discomfort" as referred to in the Final Argument of the Industrial Customers.

The Industrial Customers also ask the Board to take notice that workers in this Province cannot be said to be typically provided with air-conditioned work environments. However, no evidence was presented to support this statement. As pointed out above, all of Hydro's other major work locations have air conditioning.

Hydro's engineering staff has reviewed what is required to provide the appropriate office environment for staff at both locations and had determined that the most appropriate way to provide the appropriate office environment is a central air conditioning system and not wall-mounted air conditioning units (Transcript October 7, 2004, p. 20, lines 19 - 25 and p. 23, lines 1 - 8).

Hydro submits that it must provide a suitable work environment for all employees including those who are in the Whitbourne and Stephenville offices on a continuous daily basis, as well as those who must attend on a regular basis for safety and group meetings at these locations. Given the significant variation from the ASHRAE standard as set out in the response to IC-21, Hydro submits that it is necessary that this project proceed in 2005.

<u>Upgrade Line Depots/Storage Sheds – Baie Verte, Sops Arm, Bay d'Espoir</u> (\$151,000), B-103

In their Final Argument on page 24, the Industrial Customers state that a portion of this project can be viewed as a capital work whereas another portion should be characterized as repair work which is an operating expense.

Hydro states that the line depots at Baie Verte and Sops Arm are in excess of twenty years old and have been fully depreciated. The work proposed will extend the service life of these assets. As pointed out previously, the extension of the life of an asset is a criteria which determines that an expense is capital in nature under generally accepted accounting principles. No evidence was presented by the Industrial Customers to contradict Hydro's evidence that this type of expenditure is appropriately classified as capital. It should also be pointed out that the extension to the Bay d'Espoir depot is an increase in the service capacity of that asset and clearly should be treated as a capital expense. Hydro submits that the capital budget as submitted should be approved.

<u>Legal Surveys of Distribution Line Rights-of-Ways (\$49,600), B-108</u>

In their Final Argument on page 25, the Industrial Customers suggest that rather than proceeding to get easements, Hydro by statute, should be granted these rights-of-ways. However, this is not an option for Hydro. Hydro does not have proper easement rights to these assets and part of obtaining these rights is to have a survey done. The suggestion of the Industrial Customers to obtain a legislative amendment was not supported by any evidence called by the Industrial Customers and in fact is contrary to the information provided by Hydro at the hearing that this was not an option for Hydro (Transcript October 6, p. 141, lines 8-22).

The cost incurred to survey and obtain easement rights relating to existing distribution systems enhance the service potential of those assets through lower future operating costs since Hydro will have established rights to access lines for

maintenance and upgrading on a timely basis. Therefore, this expenditure is proposed to be capitalized under normal rules for capitalization. No evidence has been presented by the Industrial Customers to either support the solution suggested or to support its position that this is not a proper capital expenditure. Hydro submits that the project should be approved as submitted.

Purchase Mobile Oil Reclaimation Unit (\$530,900), B-110

In their Final Argument, the Industrial Customers state that this project should not be approved, as Hydro does not consider it practical to solicit proposals from the private sector with respect to an oil regeneration program. They do not dispute the appropriateness of doing the work.

Hydro has experience with respect to contracting out this work to an external contractor with the cost being approximately \$50,000 per transformer. The proposed unit would permit a regeneration program of more than five units per year and would have a positive payback within two to three years (p. B-110). As well, evidence was given that it is anticipated that the price for contracting out the service will increase in the future given the high demand for this type of service (Transcript October 7, p. 37, lines 2 - 18). The ownership of this equipment will provide greater flexibility as Hydro anticipates that it will be able to complete more than four or five units a year, given that it has sixty-seven transformers outside of the acceptable range and these are considered priority units. In addition to the cost advantages, the purchase of the unit will also reduce the labour required to perform the reclaimation operation. As well, the purchase of the unit will provide greater flexibility in scheduling and managing the work (Transcript October 7, 2004, p. 34, lines 1 - 25 and p. 35, lines 1 - 22). It also provides the opportunity to offer the service to Newfoundland Power. Preliminary discussions have already been held (Transcript, October 7, 2004, p. 87, lines 19 - 25 and p. 88, lines 1 - 4). In these circumstances it would not be prudent or practical to proceed with a request for proposals as suggested (Transcript October 7, 2004, p. 41, lines 17 - 25 and p. 42, lines 1 - 10).

The Industrial Customers do not object to an oil reclaimation plan for Hydro or that the work needs to be done. It is Hydro's submission that the least cost way to proceed is the purchase of the mobile oil reclaimation unit. Hydro submits that the project should be approved as submitted.

Replace Doble F2000 Relay Test Equipment (\$362,200), B-112

In their Final Argument on page 26, the Industrial Customers state that this project should be deferred to a future capital year given that the vendor support for the equipment will continue to the end of 2006. However, as stated in the response to IC-29 and in evidence, new and upgraded technology already installed on the system is digital which requires digital test equipment to adequately test and maintain. The amount of digital equipment which requires this type of test equipment has increased significantly in the last ten years and it is expected to continue to grow. The new digital equipment include the exciters at Bay d'Espoir, Granite Canal and Cat Arm. Suitable test equipment that is readily accessible for this critical equipment is imperative. Mr. Holden explained the types of problems that exist with respect to testing with old test equipment (Transcript October 7, 2004, p. 52, lines 10 - 25). The new digital equipment cannot be fully tested with the existing test equipment (Transcript October 7, 2004, p. 53, lines 8 - 25 and p. 54, lines 9 - 17).

Hydro submits that modern and up to date test equipment is essential for a utility to properly maintain its assets and to ensure system reliability. Given the state of modern technology in the utility industry, it is imperative that Hydro has the appropriate test equipment. Hydro submits that this project should be approved as proposed by Hydro.

2005 CAPITAL BUDGET - GENERAL PROPERTIES

The General Properties Section of the 2005 Capital Budget contains projects in the following categories:

- 1. Software Applications;
- 2. Computer Operations;
- 3. Network Services;
- 4. Administrative

In the category of Software Applications and computer operations the Industrial Customers in their Final Argument have objected to all of the projects except the replacement of the Energy Management System, B-114, which is a multi-year project with 2005 being the third year. The following paragraph sets out Hydro's position on the submissions of the Industrial Customers on these categories of projects.

SOFTWARE APPLICATIONS

Applications Enhancements (\$311,000), B-120

In their Final Argument, the Industrial Customers on page 37 state that the first three elements of this project as described on page B-120 to the Application are not proper capital expenditures. With respect to the fourth element (the risk based analysis modeling tool), the Industrial Customers say that it is a legitimate capital expenditure but that it should be deferred.

The project justification (p. B-120) explains that each and every year Hydro requires enhancements to its software applications in order to respond to ongoing requirements such as legislative and compliance changes, vendor driven changes and enhancements for customer service and staff productivity.

This project is based on Hydro's actual experience and the requirements of the business from year to year (Transcript October 8, 2004, p. 177, lines 2 - 11). The estimate provided in IC-31 for various minor enhancements is based on Hydro's experience for these type of unforeseen projects similar to what is done with respect to distribution line extensions, service extensions, surge arrestors, etc. where annual allotments are made based on Hydro's experience. It is Hydro's submission that with the number and complexity of software applications that Hydro has for both its financial and operational requirements, there will be annual minor enhancements that are required to the software. Hydro submits the evidence is clear that this is an actual requirement and that it falls within the normal capitalization policy.

The second type of enhancement in this project is related to Hydro's corporate Intranet and the third relates to the Key Performance Indicator application. The Industrial Customers state that these should be operating expenses. Both of these are enhancements in functionality which are estimated to cost over \$25,000 and which are appropriately capitalized. The determination on these enhancements has been made based on generally accepted accounting principles and is consistent with Hydro's practices and accounting principles.

The fourth element in this project relates to the risk based analysis modeling tool which was explained in evidence as an application to assist engineering staff with respect to risk management strategies and relates to hydro plant facilities (*Transcript October 8, 2004, p.128,* lines 13 - 19 and p. 187, lines 5 - 23). This particular software will allow Hydro to do a risk assessment with respect to hydro plant facilities. The Industrial Customers acknowledge in their Final Argument that this particular application is a legitimate capital project and suggest that it be deferred. However, given its nature and that it will assist with respect to risk assessments in making determinations when capital projects need

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The fourth element in this project relates to the risk based analysis modeling tool which was explained in evidence as an application to assist engineering staff with respect to risk management strategies and relates to hydro plant facilities (Transcript October 8, 2004, p. 28, lines 13 - 19 and p. 187, lines 5 - 23). This particular software will allow Hydro to do a risk assessment with respect to hydro plant facilities. The Industrial Customers acknowledge in their Final Argument that this particular application is a legitimate capital project and suggest that it be deferred. However, given its nature and that it will assist with respect to risk assessments in making determinations when capital projects need

to be done, it is Hydro's submission that it is prudent that it be done in 2005. It should not be deferred.

Security Program - Secure Remote Access (\$75,100), B-122

The Industrial Customers in their Final Argument suggested that this project be deferred. As explained in the project justification, B-122, this is a 2-year program with approximately half the funds having been approved for 2004. The focus of the 2005 work is to further enhance the authentication and log-in process used for accessing critical infrastructure such as the Energy Management System and the Distributed Control System for Holyrood. It is Hydro's view that it is critical to move forward with this, as Hydro is looking at integrating remote security administration software into these critical components to ensure only people who need access get access and thus enhance the overall network reliability (Transcript October 18, 2004, p. 4, lines 13 - 25 and p. 5, lines 1 - 6).

It is Hydro's submission that in light of the critical nature of the assets for which security is being provided, it is essential that this project be done in 2005 and not deferred.

Corporate Applications Environment (\$222,200), B-124

As described in the project justification B-124 this project includes three software upgrades (the metaframe server operating system, the network management tools and the helpdesk management tools). In their Final Argument the Industrial Customers take the position that only the portion relating to CiscoWorks should be disallowed (p. 28 of Final Argument). However, there appears to be a misstatement of the evidence relating to the CiscoWorks. CiscoWorks is a specific type of a network management tool (Transcript October 18, 2004, p. 15, lines 4 - 5; p. 16, lines 8 - 21; p. 18, lines 2 - 9 and 15 - 18). It is clear from this evidence that CiscoWorks is a network management tool which will allow Hydro to monitor the levels of service being provided by the network

including bandwidth, etc. to ensure that the network is operating properly. The Industrial Customers do not object to the network management tools component, which CiscoWorks is. Hydro submits that this project should be approved as submitted.

COMPUTER OPERATIONS

<u>iSeries Replacement (\$1,131,900), B-125</u>

The Industrial Customers, in their Final Argument on page 128, clearly do not understand the justification for this project. The current server is not capable of running the required applications in a satisfactory way. Its capacity has grown to the point that it now requires various operations to be shut down so that required software can run (Transcript October 18, 2004, p. 29, lines 14 - 25, p. 34, lines 16 - 25, p. 35, lines 1 - 35). The present server is not meeting Hydro's business and operational requirements at the current time. It must be replaced.

By using a specific supplier for this server Hydro is not limiting its future ability to access other options as stated by the Industrial Customers in their argument. The new server will be capable of running both the current version of Hydro's integrated suite of applications as well as future applications (Transcript October 18, 2004, p. 29, lines 2 - 3). Hydro is not contemplating a move to new software in the foreseeable future (Transcript October 18, 2004, p. 32, lines 12 - 15 and p. 36, lines 1 - 23). Hydro is focused on leveraging the software that it has (Transcript, October 18, 2004, p. 32, lines 12 – 15). The assertion of the Industrial Customers therefore that insufficient planning and investigation has occurred is totally without foundation. Hydro needs to replace the current server in order to be able to function with its existing software. It has no plans to move to software applications which would not be capable of being run on the new server as has been suggested. Hydro submits that this project is justified by the evidence and should be approved as submitted.

End-User (\$710,500) and Server Evergreen (\$211,900) Programs, B-127 and B-134

The Industrial Customers in their Final Argument on page 28 on the Server Evergreen project state that there is no standard with respect to the service life of servers which is a misstatement of the evidence. The response to IC-35 states that in determining the life expectancy of servers, Hydro looks at the hardware vendor's support, the operating systems support, the application vendor's support and the business requirements. Based on consideration of these factors plus experience with servers, a determination is made as to when to replace a unit. It was explained in evidence that Hydro's experience, available research with respect to the practices of others and discussion with hardware vendors are taken into account in the determination that server infrastructure typically requires to be replaced after five years (Transcript October 18, 2004, p. 43, lines 8 - 18; p. 50, lines 14 - 25 and p. 51, lines 1 - 6). Evidence was also given that the decision to replace particular servers was made after an assessment of these factors. The current servers do not support the operating system and are not supported by the vendor (Transcript October 8, 2004, p. 47, lines 21 - 25 and p. 48, lines 1 - 5).

No comment is made by the Industrial Customers on the End-User Evergreen project in their Final Argument. This is the third year of this project previously approved by the Board to continue with the replacement of computers (laptops and desktops) which must be returned to the lessor or purchased starting in the first quarter of 2005. Hydro plans to return the leased computers and acquire new desktop, laptops and thin clients required for its operational requirements. It is Hydro's submission that this project has been demonstrated to be the least cost approach for Hydro. It is the third year of a program that has been approved by the Board for 2003 and 2004. There are no changes in circumstances which would require the Board to not approve the third year of

changing out of the leased computers. Hydro submits that the project should be approved as submitted.

Peripheral Infrastructure Replacement (\$117,600), B-131

The Industrial Customers in their Final Argument on page 29 provide no argument to support their submission that this project should not be approved. The evidence with respect to this project is that it is an annual requirement each year to replace a number of peripheral devices that have reached the end of their useful life, including printers, multi-functional devices, scanners and projectors. The evidence given during the hearing was that two multi-functional devices and three printers are being replaced in 2005 (Transcript October 18, 2004, p. 52, lines 23 - 24). The decision for replacement was based on an analysis and review of each unit and their service record, their breakdowns, etc. (Transcript, October 18, 2004, p. 53, lines 20 - 25 and p. 54, lines 1 - 12). Hydro submits that the evidence has demonstrated there has been an analysis done of the equipment to be replaced and that replacement has been appropriately justified. This project should be approved as submitted.

Security Strategy Deployment (\$80, 500), B-132

The Industrial Customers in their Final Argument agree that this project should proceed (page 30) but merely suggest that Hydro be required to file further information when bids are received on the project. It is Hydro's position that this project will result in operational savings and that it should be approved.

Replace VHF Mobile Radio System (\$2,915,000), B-137

Hydro has proposed the replacement of its current mobile radio system. Hydro initially proposed this project as part of the 2002 capital budget and the Board in Order No. P.U. 7 (2002-2003) denied approval and required Hydro to supply additional justification, including a cost benefit analysis. Hydro resubmitted the project as part of its 2004 capital budget and at that time both the Industrial Customers and Newfoundland Power raised issues concerning the

business case submitted in Hydro's proposal. The Board in Order No. P.U. 29 (2003) did not approve the project and instead directed a process be undertaken by Newfoundland Power and Hydro for the review of their respective mobile radio equipment (Order No. P.U. 29 (2003), p. 33 - 34).

Extensive evidence is before the Board on this project, including the prefiled evidence (that is, the project justification and an engineering report contained under Tab 4, Section G to the Application), direct evidence and crossexamination. No party has taken exception to any of the evidence produced by Hydro.

The evidence is clear that:

- 1. Hydro requires a mobile radio system for switching, trouble-shooting, live line work, emergency repair and general maintenance.
- 2. Hydro requires a mobile radio system in order to effectively and efficiently operate its facilities. No other alternative exists.
- 3. The current system is physically, functionally and technologically obsolete. Manufacturer support is non-existent for the switch and site controllers. There are inadequate spares to maintain the central switch and site controllers. Hydro is unable to secure additional spares and repair services are limited. The repeater equipment has been discontinued and there is limited repair support for it. New modules are unavailable for the repeater equipment.
- The current system is subject to random failure with undetermined causes and expansion is not possible to support operational requirements.
- Complete system failure is inevitable and will impede Hydro's ability to do work. Productivity will be decreased and outages to customers will be extended.
- 6. Replacement after failure will take 18 to 24 months.

The report contained in Tab 4 Section G to the Application on pages 7 to 9 (the "Report") set out the requirements of the Board in Order No. P.U. 29 (2003) and the steps taken by both Hydro and Newfoundland Power to comply. The process required that Newfoundland Power submit to Hydro its technical requirements for its mobile radio system, that Hydro prepare a specification for a new mobile radio system capable of meeting Newfoundland Power's requirements and that Newfoundland Power advise of its position with respect to its mobile radio requirements. Both Hydro and Newfoundland Power retained technical consultants to assist them in this process. The Report outlines the analysis undertaken by Hydro in response to the Board's Order, as well as its conclusions with respect to its mobile radio requirements. Newfoundland Power also filed a report from its consultant in response to information request PUB-22.

This analysis has demonstrated that Newfoundland Power's VHF mobile radio system does not require replacement before 2011, while Hydro's system requires immediate replacement. The evidence is that the least cost approach in these circumstances is for Hydro to replace its existing system with provision to include the Provincial Department of Transportation and Works on the system and to allow for the possible integration of Newfoundland Power at a later date.

Newfoundland Power in its Final Argument states that it supports the conclusion that Hydro's proposal is the least cost approach and states that the project has been justified on the record before the Board. The Industrial Customers in their Final Argument make no submission on the approval of the project (page 31) but point out that savings have accrued as a result of the deferral of this project.

Hydro agrees that savings have arisen due to the deferral of the project. It is generally true for any project that deferral will result in savings. However, what the Industrial Customers fail to point out is the risk of being unable to provide adequate reliable service that has been borne throughout this period. It is

Hydro's view, as stated during the hearing, that it would have been prudent to have undertaken this mobile radio project replacement at an earlier date, given its obsolescence and the period of time required to replace the system and its criticality to Hydro's operations. It is true that Hydro has not experienced a catastrophic failure of the mobile radio system in the past couple of years. However, it is the opinion of Hydro's engineering experts in this area, that this indeed has been fortuitous. As Mr. Dunphy described it, the request to undertake the project in 2002 was prudent and at this time it is absolutely critical (Transcript October 8, 2004, p. 72, lines 13 - 20). The current system is "literally hanging by a thread" (Transcript October 8, 2004, p. 27, lines 12 - 15). Hydro has no confidence that it will continue to operate.

The question of whether a project can be deferred is one which is considered by Hydro when reviewing capital budgets as was explained in evidence (Transcript October 8, 2004, p. 66, lines 18 – 25 and p. 67, line 1). This determination is often based on knowledge of the current operating system, Hydro's experience with the particular equipment or facilities, its knowledge with respect to similar equipment, its knowledge of the experience of other utilities with the same issue and engineering analysis and judgment as to whether it is appropriate to defer a project. Another key consideration is the nature of the equipment or asset and whether it is a critical component of Hydro's operations. All of these factors need to be considered, as well as any economic impacts of deferral of a project. With deferral comes the risk of being unable to provide adequate, reliable service and the question must always be whether the risk is an acceptable and tolerable one. In Hydro's view, the mobile radio project is absolutely critical to be done at this time and should be approved by the Board.

Hydro, in its evidence, explained that it proposes to proceed with a functional specification. Mr. Haynes explained the reason for a functional specification, which is to obtain the expertise of vendors to come up with solutions to get the best technological solution available. Mr. Haynes also

explained that functional specifications are fairly common, particularly in the communications area and were used by Hydro for the first microwave system, for the replacement of the microwave system, for the first mobile radio system, for the first distributed control system at Holyrood and for Granite Canal (Transcript October 8, 2004, p. 50, lines 5 – 25 and p. 51, lines 1 – 18). Based on Hydro's experience, a functional specification is the best approach (Transcript October 8, 2004, ps. 50 to 52). Mr. Haynes further explained that the functional specification will include the ability to meet the requirements of the Department of Transportation and Works and the future requirements for Newfoundland Power (Transcript October 8, 2004, p. 96, lines 9 - 25 and p. 97, lines 1 - 8).

Hydro submits that the record before the Board clearly demonstrates that this project is not only prudent, but critical to be done at this time. Newfoundland Power supports this position and the Industrial Customers take no position with respect to whether the Board should approve this project. Hydro submits that the project should be approved as submitted.

NETWORK SERVICES

Microwave Site Refurbishing (\$293,800), B-141

The Industrial Customers in their Final Argument on page 41 do not object to the work contemplated by this project being done, but state that the expenditures should be classified as operating and not capital.

The microwave site tower typically has a design life of twenty to twenty-five years (Transcript October 8, 2004, p. 139, lines 17 - 19). The particular microwave site in question was installed more than twenty-four years ago (Transcript October 8, 2004, p. 148, lines 1 - 3). The recommended improvements to the site includes tower painting, galvanization of the anchor heads, replacement of guys and electrical assessment. They were recommended by a structural engineer (Transcript October 8, 2004, p. 143, lines

9 - 19). The assessment is that the life of the tower will be extended to between fifty and forty years if the project is completed (Transcript October 8, 2004, p. 144, lines 16 - 19). It is clear that the work being done will significantly extend the service life of these assets which have been fully depreciated. Under generally accepted accounting principles this type of expenditure would be capitalized.

Hydro submits that the expenditure has been appropriately characterized by its professional accountants under normal accounting principles as capital and should be approved by the Board.

Replace Remote Terminal Units for Hydro (\$149, 500), B-143

In their Final Argument the Industrial Customers on page 32 propose that this project be deferred to a future capital budget year. Hydro does not agree with this submission.

The proposed project is the replacement of two remote terminal units used for the remote monitoring and control of plants and terminal stations from the Energy Control Centre. The sites proposed for the replacement are the Bay d'Espoir Plant and the Bay d'Espoir Terminal Station. The project justification on page B-143 explains that the existing terminal units are obsolete. Spares and repair services are not available. The Industrial Customers suggest that spare parts scavenged from decommissioned units can be used as a reliable option. Hydro does not agree. Such spare parts are meant to be used as a stop-gap solution only and are not expected to support critical systems as they are not reliable (Transcript October 8, 2004, p. 157, lines 7 - 11). They cannot be relied on in the long term (Transcript, October 8, 2004, p. 156, lines 5 – 11) and the Industrial Customers accepted this point.

As well, the Industrial Customers suggest that there is an implicit lower priority for the particular two units being proposed to be replaced. This is not

correct. The replacement of these units was not postponed because of a lower priority. It was scheduled to occur in 2005 as part of a well thought-out plan (Transcript October 8, 2004, p. 152, lines 16 - 23). A prudent and managed plan was developed to replace all of the obsolete remote terminal units as it did not make sense to do all 32 at once (Transcript October 8, 2004, p. 152, lines 16 - 23). The first scheduled units were replaced as other changes had been contemplated for the site in order to avoid redoing work (Transcript October 8, 2004, p. 151, line 22).

Given the evidence with respect to this project, it is Hydro's position that it is not appropriate to defer the replacement of the terminal units at Bay d'Espoir, which is one of Hydro's most critical systems with the largest generation capacity. Hydro submits that the project should be approved as submitted.

Replace Air Conditioners (\$55,300), B-144

In their Final Argument the Industrial Customers argue that this project should be deferred to a future capital budget year (page 34).

The justification for this project states that the air conditioner at Stoney Brook Terminal Station is not functioning and cannot be repaired because parts are unavailable. Electronic equipment requires specific ranges of humidity and temperature in order to operate correctly. The replacement of the air conditioning unit is required to maintain proper environmental conditions for the equipment (Transcript, October 8, p. 160, lines 12 - 13).

The Stoney Brook Terminal Station is a critical site for Hydro containing microwave equipment for several of the critical 230 kV bulk transmission lines. Hydro has to provide properly for the environmental requirements of this equipment as this equipment could cause outages which in turn could result in customer outages.

With respect to Deer Lake, the existing air conditioning unit which is not effective was purchased prior to additional monitoring equipment being installed, this adds to the heating load of the building and thus the unit being undersized for the requirements (Transcript October 8, 2004, p. 164, lines 13 - 15 and p. 165, line 10). The air quality assessment referred to by the Industrial Customers in their Final Argument did not specifically recommend a type or size of unit. The existing air conditioning unit was purchased prior to the expansion of the building which occurred in 2003, with the current unit being insufficient to handle the additional size of the office space.

Hydro submits that this project should be approved as submitted as it is required to maintain the appropriate physical environment for critical communications equipment at both locations.

ADMINISTRATIVE

Replace 2004 Vehicles/Replace 2005 Vehicles Projects, B-147 and B-149

In their Final Argument the Industrial Customers made comments with respect to Hydro's fleet review and stated that Hydro did not produce written paper indicating the mandate, the direction, the steps or the conclusions with respect to the review. Mr. Martin explained that, while there were a number of memos with respect to the review process, he had not considered a memo or a power point presentation to be a report (Transcript October 6, p. 152, lines 23 - 25, p. 153, lines 2 - 25 and p. 154, lines 1 - 4). While a written paper may not have been provided, direct oral evidence was given by Mr. Martin with respect to the review. Mr. Martin explained that the review was undertaken by the Manager of Transportation and Regional Services and three other operational managers (Transcript October 6, 2004, p. 81, lines 6 - 9). Mr. Martin explained the mandate was to ensure that Hydro's vehicle and mobile equipment fleet was the minimum required (Transcript October 6, 2004, p.81, lines 9 -12 and October 6, 2004, p.156, lines 7 -24). This review included an analysis of the use of vehicles, the

number of vehicles and the operational requirements for vehicles (Transcript October 6, 2004, p. 157, lines 7 - 22). The recommendations from the review were brought forward to Executive Management and resulted in a reduction of fleet requirements of 23 units for on-road vehicles, a reduction in off-road vehicles by 6 and a reduction in mobile equipment by 34 units. Savings in capital replacement of \$2.2 million over a five-year timeframe are estimated to be achieved following implementation of the recommendations and there will be an annual operating budget savings of \$100,000 (page 81, lines 12 to 25). The specific impact on the 2005 budget is a savings of \$500,000 for on-road vehicles and a \$60,000 reduction for mobile equipment units (Transcript October 6, 2004, p. 82, lines 5 - 9).

It is Hydro's position that there has been full disclosure of the review process and its results given during the hearing. In light of Hydro's comprehensive review and the significant savings identified in this review, there is no justification for another review by an external party with its associated costs as suggested by the Industrial Customers.

In their Final Argument, the Industrial Customers referred to the increase in vehicles assigned to St. John's in 2003 to 21 from the previous 14 vehicles (p. 34, Final Argument). Mr. Martin explained in his evidence that this resulted from the consolidation of units previously used in capital projects in the Head Office in St. John's where they are used for other ongoing capital projects. It was not an increase in usage for the Head Office area (Transcript October 6, 2004, p. 166, lines 19 - 25, page 167, lines 1 - 4, p. 167, lines 12 - 23 and p. 166, lines 1 - 18).

The Industrial Customers on p. 34 of their Final Argument refer to the size of the contingency for this project. This contingency is for the entire budget over the two year period and will only be utilized if absolutely necessary.

In their Final Argument the Industrial Customers also state that the criteria for the replacement of vehicles has not been reviewed recently. As stated by Mr. Martin, the criteria for replacing the fleet vehicles was done in 1998 and followed consultation with other utilities including Nova Scotia Power, New Brunswick Power, Manitoba Hydro and Newfoundland Power (Transcript October 6, 2004, p. 160, lines 1 - 7). This criteria is only a rule of thumb or a guideline to trigger a review of each particular vehicle. The decision to replace is made based on the condition of the individual vehicle, its maintenance cost and its physical condition. The criteria for vehicle replacement has been accepted by the Board previously and is comparable to that currently used by Newfoundland Power as well as the other utilities referenced above.

Hydro does acknowledge, as stated by the Industrial Customers on page 34 of their Final Argument, that the information contained on page B-147 relating to the conditions of vehicles being replaced was an error and was corrected by Mr. Martin in evidence (Transcript October 7, 2004, p. 73 and p. 74). While Hydro continually strives to ensure that all information filed is correct, errors occur from time to time and such errors discovered after filing are corrected as soon as it is determined there was an error. The process allows revisions to be filed throughout the hearing to correct errors or provide additional information.

The Industrial Customers submit in their Final Argument that the budget for vehicles should be arbitrarily reduced by \$300,000 for 2004 and by \$500,000 for 2005 for a total of \$800,000. This is an arbitrary number given without any consideration of Hydro's requirements and is contrary to the evidence called by Hydro to support its operational requirements. Hydro submits that the information before the Board provides more than an adequate record to support the capital projects for vehicle replacements on B-147 and B-149. Hydro requests the approval of both projects.

2005 CAPITAL BUDGET – ALLOWANCE FOR UNFORESEEN EVENTS

The last major category in the 2005 capital budget is the Allowance for Unforeseen Events which the Board has approved in the past to cover unforeseen emergency funding requirements of a capital nature. In Order No. P.U. 7 (2002-2003) the Board imposed five conditions on the use of this contingency amount. Hydro proposed that this amount of \$1,000,000 be included in the 2005 capital budget as an Allowance for Unforeseen Events which would be subject to the conditions outlined in Order No. P.U. 7 (2002-2003).

FIXING OF RATE BASE

Under Section 78 of the Act the Board has the power to fix and determine a utility's rate base. The Board fixed Hydro's 2002 rate base at \$1,356,207,000 by Order No. P.U. 14 (2004). In this Application, Hydro is seeking an Order of the Board fixing its 2003 rate base at \$1,422,412,000. Section H to the Application sets out the calculation. Hydro explained that the reason for the increase is primarily related to the Granite Canal assets (Finance, pre-filed evidence, p. 4, lines 22 - 25). The Board's financial consultant has concluded that the 2003 average rate base amount proposed by Hydro is accurate and in accordance with Board Orders and established regulatory practice (Information No. 1, letter from Board's financial consultant). In his testimony Mr. Roberts also explained that the results for 2003 are actual numbers which have been known, reviewed and audited by the Board's financial consultants. The fixing of the rate base for 2003 will eliminate any major adjustments which could be of concern to external auditors and credit rating agencies (Transcript October 18, 2004, p. 102, lines 10 - 19 and p. 109, lines 4 - 22). The fixing of the rate base on an annual basis provides benefits for certainty in financial reporting for both external auditors and rating agencies.

Hydro agrees with the submissions contained in the Final Argument of Newfoundland Power that the capital expenditures up to 2003, which Hydro proposes be included in the 2003 rate base, were made pursuant to approvals of the Board under Section 41 of the Act or pursuant to the direction of the Lieutenant Governor-in-Council and that fixing the amounts which have already been allowed, provides certainty for both rating agencies and bondholders. Hydro further agrees with Newfoundland Power that the effect of delaying approval of an annual rate base until each GRA will serve to increase the complexity and length of GRA hearings and that there is no valid reason to delay approving the annual rate base.

While it is correct that Hydro's rate base has not been fixed in the context of the capital budget hearing, except in 2002 when the issue of a capital budget was addressed in the context of the 2001 GRA, Hydro would point out that the rate base was fixed for 2002 during the 2003 GRA which was filed very shortly after the conclusion of the 2001 GRA. This capital budget hearing is the first appropriate time for Hydro to have requested the fixing of an annual rate base in a capital budget hearing. Hydro points out that this is the regulatory practice with respect to the other utility in this jurisdiction and there are no reasons to suggest a different regulatory treatment for Hydro than for Newfoundland Power in this regard.

Hydro would point out that no evidence was lead by the Industrial Customers to contest any element proposed to be included in rate base for 2003. In the absence of any evidence requiring a change and in light of the regulatory practice in this jurisdiction, Hydro submits that it is appropriate that the Board approve Hydro's 2003 average rate base as requested in the Application.

COSTS

The Industrial Customers have requested that the Board allow them recovery of their costs incurred in this hearing. On page 36 of their Final Argument they state that Hydro includes the cost of this hearing in operating expense and recovers these costs in full. This is not correct. Hydro is allowed to recover in rates the amount it has included in its test year forecast of costs, as approved by the Board. In determining its forecast of costs, Hydro did not include costs for capital budget hearings in the estimate recently allowed by the Board for the 2004 test year in the 2003 GRA. Any award of costs with respect to this proceeding will be outside the regulatory costs contemplated when the 2004 rates were set.

Hydro would point out that the Board has never allowed costs to the Industrial Customers with respect to a capital budget hearing, other than the 2004 capital budget hearing where a partial award of costs only was made and that was in respect to an expert witness.

In determining whether it is appropriate to award costs, Hydro submits that the Board must take into account the ability of the Intervenors to pay. It is Hydro's submission that the Industrial Customers should not be awarded costs in this proceeding.

CONCLUSION

Hydro has a statutory obligation to supply customers with reliable service at least cost in a safe environment for its employees and the general public. Hydro also has an obligation to provide service and facilities which are reasonably safe and adequate. In order to meet these statutory obligations Hydro must incur capital expenditures each year. The Board is required under Section 41 of the Act to review and to approve capital projects in excess of \$50,000. In carrying out its statutory powers under Section 41 of the Act, the Board is not required to substitute its judgment for that of Hydro's Management and must avoid micromanaging the utility. At the same time the Board must be satisfied that the capital expenditures proposed by Hydro are required to provide least cost, reliable power to its customers.

Hydro submits that it has demonstrated in the justification provided with this Application, during the request for information process and during the hearing phase, that appropriate planning and careful consideration of all projects have been undertaken by experienced professionals with respect to the 2005 capital budget before the Board.

Hydro is seeking approval of a capital budget for 2005 of \$42.4 million. Hydro submits that it has provided adequate justification for all the proposed projects and requests approval of the 2005 capital budget as submitted.

Hydro's 2005 capital budget application is in compliance with statutory requirements and the direction given by the Board in Order No. P.U. 7 (2002-2003). The capital projects for which approval is sought are required to provide least cost, reliable power to customers.