P.U. 36 (2002-2003)

IN THE MATTER OF the *Public Utilities Act*, RSN 1990, c. P-47 (the "*Act*");

and

IN THE MATTER OF an application by Newfoundland Power Inc. for an Order pursuant to Sections 41 and 78 of the *Act*:

a) approving its 2003 Capital Budget of $55,790,000;
b) approving the purchase, construction and leases in 2003 of the improvements and additions to its property as set out in the application; and
c) fixing and determining its average rate base for 2001 in the amount of $545,162,000.

BEFORE:

Robert Noseworthy
Chair and Chief Executive Officer

Darlene Whalen, P.Eng.,
Vice-Chair

John William Finn, Q.C.,
Commissioner

December 23rd, 2002

TABLE OF CONTENTS

I. BACKGROUND

1. THE APPLICATION

Newfoundland Power Inc. (NP) filed an application with the Board of Commissioners of Public Utilities (the "Board") on August 2, 2002 requesting the Board make an order:

a) approving the purchase and construction in 2003 relating to improvements and additions to its property as set out in the application, including approval of its 2003 Capital Budget in the amount of $55,790,000; and
b) fixing and determining its average rate base for 2001 in the amount of $545,162,000.

On October 21, 2002 NP filed an amended 2003 Capital Budget application (the "Application") altering the wording of the original application to include a request for approval of leases in excess of $5,000 which were not contained in the initial application. The amended application was accepted and is the subject of this Decision.

2. BOARD AUTHORITY AND PROCESS

i) Legislation

Section 41(1) of the *Act* requires a public utility to submit an annual capital budget of proposed improvements or additions to its property to the Board for its approval not later than December 15 in each year for the next calendar year. This budget is also required to include an estimate of contributions toward the cost of improvements or additions to its property which the public utility intends to demand from its customers.

Section 41(3) prohibits a public utility from proceeding without the prior approval of the Board with the construction, purchase or lease of improvements or additions to its property

where a) the cost of the construction or purchase is in excess of $50,000; or b) the cost of the lease is in excess of $5,000 in a year of the lease.

Section 78 gives the Board the authority to fix and determine the rate base for the service provided or supplied to the public by the utility and also gives the Board the power to revise the rate base. Section 78 also provides the Board with guidance on the elements that may be included in the rate base.

ii) Process

The Board published notice of the Application commencing on October 23, 2002 in various newspapers throughout the Province, setting the hearing date for November 13, 2002 and inviting intervenor submissions. On October 30, 2002 the Board received intervenor submissions from the government appointed Consumer Advocate (CA), Mr. Dennis Browne, and from Newfoundland and Labrador Hydro (NLH).

Pursuant to section 14(1) of the Board's Regulations, information requests were directed to NP from the Board, the CA, and NLH, and also to the Board from the CA. NP pre-filed testimony and exhibits for its witnesses with the Board and parties on October 28, 2002.

The public hearing convened on Wednesday, November 13, 2002 with the following parties appearing:

Party	Represented By
Newfoundland Power Inc.	Gillian Butler, Q.C. and Peter Alteen, LL.B.
Consumer Advocate, Dennis Browne, Q.C.	Stephen Fitzgerald, LL.B.
Newfoundland and Labrador Hydro	Maureen Greene, Q.C. and GeoffreyYoung, LL.B.

The Board was assisted by Board Hearing Counsel Mark Kennedy, LL.B. and by Board Counsel, Dwanda Newman, LL.B.

At the opening of the hearing the CA filed a notice of motion with the Board respecting the disclosure of certain information by NP, specifically the minutes of the company's Board of Director's meetings where the 2003 Capital Budget was discussed and received corporate approval. The CA asked the Board to make an order compelling NP to provide full disclosure of the information requested. The Board heard this motion on November 15, 2002. Upon hearing

from the parties the Board denied the CA's motion but did afford the CA the opportunity to request the Board's financial consultants Grant Thornton to review the minutes and make their notes available to the CA.

During the hearing NP called the following witnesses:

Philip Hughes, C.A., President and Chief Executive Officer
Barry Perry, C.A., Vice President, Finance and Chief Financial Officer
Earl Ludlow, P. Eng.,Vice President, Engineering and Operations
Nora Duke, Vice President, Customer and Corporate Services, and
Peter Collins, Manager, Information Services.

The CA and NLH participated in the hearing through cross examination of NP's witnesses and presentation of final argument. The hearing covered 7 days (November 13-15 and November 19–22) with final oral argument heard on November 28, 2002.

II. REGULATION OF CAPITAL BUDGETS

This Application represented a significant departure for the Board, NP and Intervenors in expanding the process surrounding a utility's capital budget application. The pre-hearing process and filing requirements were more rigorous, the evidentiary record more extensive and the length of the public hearing was considerably longer than any previous capital budget application before the Board.

Prior to 1997, the capital budget approval process for NP was in the form of a meeting conducted by the Board with the utility. The approval of the capital budget followed questions and discussion resulting from the meeting as well as prior supervisory/compliance reviews undertaken by the Board. Beginning in 1997, the Board initiated public hearings into NP's annual capital budget proposals. This 2003 capital budget application of NP is the first application of its kind where a Consumer Advocate has been appointed by government to represent the interest of consumers.

With a view to the precedent established by this Application, before examining the particulars of the 2003 capital budget and rate base proposals of NP, the Board feels there is

merit in reviewing some of the broader issues raised during the hearing with respect to capital budget applications in general.

1. ROLE OF THE BOARD

As previously outlined the statutory authority of the Board regarding a utility's capital budget is vested in section 41 of the *Act.* Section 41(1) requires a public utility to submit an annual capital budget to the Board for its approval. Section 41(3) prohibits the utility, above specified dollar limits set out in the legislation, from proceeding with the construction, purchase or lease of improvements or additions to its property without the prior approval of the Board.

The first key issue arising from the legislation centers on the role of the Board in carrying out its authority respecting approval of capital budgets submitted by utilities.

NP submits that the Board's role is to ascertain whether its proposed capital expenditures are reasonable and properly incurred in keeping with the statutory provisions governing the utility. NP points to section 3(b) of the *Electrical Power Control Act, 1994* and in particular notes that the utility has statutory obligations to ensure sources and facilities for the production, transmission and distribution of power are managed and operated in an efficient manner, consumers have equitable access to an adequate supply of power, and that this power is delivered at the lowest possible cost consistent with reliable service. In a regulatory context NP indicates that if the Board concludes proposed capital expenditures are reasonable based on these legislative imperatives, then the capital budget must be approved.

In addition to the legislation, the CA refers to Mr. Justice Green's comments in the Stated Case[1] that the Board is generally charged with balancing the competing interests of consumers and investors in the utility. The CA submits that the public utility must prove the necessity and reasonableness of any expenditure before the Board and it is the Board's duty to determine what appropriate expense burden the ratepayer must bear.

The Board acknowledges its role as one of testing the necessity and reasonableness of the utility's capital expenditures based on efficient management and operation of its assets as well as equitable access to least cost and reliable power while at the same time maintaining a balance

[1] Newfoundland (Board of Commissioners of Public Utilities)(Re)(1998), 64 NFLD. & PEI R. 60.(NFLD.CA)

between the competing interests of consumers and investors in the utility. Over the years, these principles have been generally accepted by parties before the Board in capital budget hearings and this hearing is no exception.

2. BOARD'S APPROACH TO REGULATION OF CAPITAL BUDGETS

While the role of the Board is set along relatively straightforward principles, the central challenge in implementing regulation is how this role gets operationalized. The fundamental issue becomes one of justification and whether or not appropriate quantitative and qualitative data is available to the Board to determine the necessity and reasonableness of capital expenditures requested by the utility in meeting its legislative imperatives.

NP submits that its 2003 capital budget application meets the requirements of the legislation and is consistent with regulatory practices which have evolved over many years resulting from prior capital budget applications. NP indicates net present value (NPV) methodology is applied as appropriate in accordance with P.U. 6 (1991). Numerous regulatory reports on capital expenditures are also filed as requested by the Board in its supervisory capacity under section 16 of the *Act*. In addition, NP notes the Board has previously commissioned an independent engineer to review its technical operations, most recently in 1998[2].

NP further argues the Board's supervisory mandate is to determine if the proposed capital budget is a reflection of sound management and engineering judgement but contends this mandate should not extend to a detailed review by the Board of the accounting or the engineering data and tools that underlie these judgements. NP submits that excessive detail is neither required in a capital budget application nor is it necessary in order for the Board to cost effectively fulfill its own mandate. NP submits the Board should not micro-manage the utility nor attempt to manage it at all.

NP concludes that its interpretation of the legislation, processes, justifications and reporting requirement which have matured and evolved over the years contains no ambiguity for

[2] Report on Newfoundland Light & Power Co. Limited Re Quality of Service and Reliability of Supply, Prepared for the Board by D.G. Brown, P.Eng., 1998-10-22

NP and the utility expressed a caution to the Board as to how it should treat these issues as a result of this hearing.

The CA referred to the Stated Case and again noted the comments of Mr. Justice Green that the Board has the right to obtain from the public utility all information necessary to enable the Board to fulfill its duties. The CA concurs with NP that the Board is not the manager of the utility and should not as a general rule substitute its judgement on managerial and business issues for that of the officers of the enterprise. The CA concludes that management's function is to set the level of expenses and reiterates that the Board's duty is to determine what appropriate expense the ratepayer must bear.

The CA argued NP's capital budget contains a number of shortcomings relating to expenditure variances, long-term planning, project justification/monitoring and its historical context.

NLH outlined in its final argument that consistency by the Board in regulating each utility was an important issue. NLH further endorsed the position that the Board should not micro-manage but acknowledged that, for proper economic regulation to occur, the Board has to satisfy itself that the purpose, costs, benefits, alternatives and timing of every capital project is appropriate and reasonable.

Board Hearing Counsel suggested a number of possible actions/directions the Board may wish to address arising from this hearing, including:

- Enhanced reliability targets tied to justifying capital expenditures and improving customer service;
- Financial benchmarking to determine an acceptable level of capital spending;
- Adoption of a policy on how utilities should view reports by Board experts;
- Distinction between expenditures for projects related directly versus indirectly to the provision of electrical service;
- Clarification of the budgetary approval process; and
- Improved technical monitoring by the Board of capital expenditures.

The Board acknowledges the importance of effectively regulating the capital expenditures of the utilities in discharging its broader obligations pursuant to section 80 of the *Act,* which mandates the implementation of a sound regulatory framework founded in rate base

regulation. Rate base by definition is the amount of investment comprising primarily depreciated plant and equipment plus working capital as well as certain deferred assets/costs attributable to future operations. The annual level of capital expenditures, and hence improvements and additions to property and equipment, contributes directly toward the setting of rate base and influences the cost of electrical service to the customer. In addition, the Board is cognizant of the ever-increasing complexity and technical considerations surrounding the supply of electricity by both utilities operating in the Province.

The Board accepts that NP's capital budget conforms with processes and procedures that have evolved over time. The Board is confident that sound engineering and managerial judgement is exercised by NP respecting the capital budget. The Board notes that corporate performance measures involving reliability, operating costs, and customer service have improved during the past few years and NP is to be commended for the positive trending in these key areas. The Board is also encouraged by the comments of Mr. Philip Hughes, NP's President and Chief Executive Officer, that he will be striving to further improve performance in these areas.

Despite these findings, the Board is ever cognizant of its own on-going responsibility to improve the regulatory framework under which utilities operate. Bearing this in mind, the Board acknowledges a number of concerns expressed throughout the course of the hearing by the intervenors and Board Hearing Counsel involving the regulation of NP's capital expenditures. Some of the more significant issues are as follows:

- The adequacy of existing tests and measures justifying to the Board the necessity and reasonableness of capital expenditures was raised. Some examples raised by the CA and Board Hearing Counsel include reliability measures, requirements for NPV analyses and enhanced project justification.
- The most recent independent technical reviews conducted by the Board of both NLH's and NP's operations were completed in 1999. The Board feels such reviews are useful and necessary in order for it to properly supervise the technical and operating characteristics of the utilities. The value of such an assessment was recognized by both the CA and Board Hearing Counsel at this hearing. The scope, timing and methodologies to be used in subsequent reviews should be examined with a view to improving the usefulness of these reviews to both the Board and the utilities.

- The question of the Board applying fair and consistent regulatory practices and requirements on each respective utility while recognizing their fundamental differences was an important issue which emerged from the hearing. This topic was raised by both NLH and the CA. NLH indicated Board guidance on this question as one of its primary motivations for intervening in the hearing. As an example, the Board notes that, based on NLH's requests for information on the applicability of the minimum filing requirements currently in place for both utilities, there seems to be a difference in interpretation of the guidelines and the projects to which they apply. These guidelines, which were put in place on the basis of a joint report from both utilities in 1998, should be reviewed.
- The issue of proper long range planning was raised by the CA during the hearing. The Board feels appropriate statements of goals and objectives by the utility coupled with measures and outcomes explaining whether or not such goals and objectives have been achieved will serve to better fulfill the regulatory obligations and responsibilities of the Board and hence reduce potential conflict between the role of the Board and the role of management.
- The separation of issues pertaining to the capital budget application and which issues, more appropriately, should be addressed as part of NP's General Rate Application filed with the Board on October 11, 2002, became the subject of argument at this hearing. For example, the question of whether or not it was absolutely critical that approval of the 2001 rate base be considered as part of the capital budget proceeding was raised. While the Board ruled on these matters in this Application, the parties may benefit in future from the development of suitable guidelines governing capital budget applications.
- The issue of what constitutes a project impacts the clarity, justification and regulatory accountability respecting capital budget applications. The Board believes a focus on enhanced project definition, format and justification will benefit both the utilities and the Board in streamlining future capital budget applications.

The Board is of the opinion that these specific concerns, along with any other regulatory matters of interest to the parties surrounding the capital budget, should be addressed. While the Board concludes there was insufficient evidence available to it at this hearing to render decisions on items identified above, the Board believes there is merit in exploring these capital budget

issues with the utilities and interested parties in the form of a technical conference. To that end NP will be required to attend a technical conference where the issues of process and filing requirements for capital budget applications will be addressed. It is also expected that this conference should serve to clarify the responsibilities of the utility and the Board with respect to the capital expenditure approval process as required under the *Act*. The Board anticipates other parties will be involved in this process, including NLH. An agenda identifying issues for the technical conference along with its timing will be formulated in consultation with the conference participants. NP will be required to attend a technical conference addressing the ongoing regulation of capital expenditures upon the terms and conditions directed by the Board.

Until these issues are addressed, the Board is of the opinion that it is necessary to provide specific guidelines to the utility for its next capital budget application. In P.U. 7(2002-2003) the Board ordered NLH to adhere to specific guidelines for its capital budget applications. The Board notes the argument of NP during the hearing that each utility is unique and that the same guidelines may not be appropriate. While the Board acknowledges the differences in the two utilities it finds that the guidelines as set out in P.U. 7(2002-2003) are appropriate to NP and would be of assistance to the Board in making a determination on the reasonableness of proposed capital expenditures.

NP will be required to follow guidelines and procedures with respect to capital budget applications in the future. Until further directed by the Board NP will follow the guidelines as set out in Schedule C to this Decision, which are based on those set by the Board for NLH in P.U. 7 (2002-2003).

III. PROPOSED 2003 CAPITAL BUDGET

1. OVERVIEW

NP has proposed a total capital budget of $55,790,000 for 2003, according to the following breakdown:

Energy Supply	$ 7,076,000
Substations	$ 5,887,000
Transmission	$ 4,629,000
Distribution	$25,707,000
General Property	$ 1,660,000
Transportation	$ 2,141,000
Telecommunications	$ 383,000
Information Systems	$ 5,507,000
General Expenses Capital	$ 2,800,000
	$55,790,000

Each category of the capital budget consists of individual expenditure items organized along common subject lines. The Board will not describe or refer to each individual expenditure in this Decision but rather will focus its discussion and specific findings on those projects or expenditures in each category that have been objected to or questioned by the parties or those which the Board makes a specific finding on as a result of the proceeding.

2. 2003 CAPITAL PROJECTS

i) Energy Supply

This category consists of projects related to facility rehabilitation at NP's hydro and thermal plants, penstock replacement at Lockston, purchasing portable diesel generation, and major electrical equipment repairs. The CA questioned NP's proposal to purchase a portable generation unit.

NP currently has three (3) portable generation units, consisting of one 7.2 MW portable gas turbine and two portable diesel generators, rated at 700 kW (Portable #1) and 670 kW (Portable #2). All three portable generation units are located at NP's Grand Bay substation in Port aux Basques unless required elsewhere. These units are usually run during system outages in the area. NP plans to decommission Portable #2 in 2003 as it is no longer roadworthy.

In its Application NP is proposing to purchase a 2.5 MW portable diesel generating unit at a cost of $1,500,000. It is proposed that the new portable generation unit be located at a radially fed substation during the winter months and, in the summer, the unit will be moved as necessary to support construction or repair activities.

The CA submits that NP has allowed the existing portable diesel generating units stationed at Port aux Basques to deteriorate to the point that they now need to be replaced instead of completing necessary maintenance work to extend the service life of the units. The CA points to NP's 1997 inspection reports filed in response to CA-17 which indicated that the service lives of both Portable #1 and Portable #2 could be extended if certain capital improvements were undertaken. The CA argued that NP could repair the existing diesel units and there is no need to purchase additional portable diesel generators at this time.

The Board accepts NP's evidence that the existing units should be decommissioned and replaced with a single 2.5 MW portable diesel generating unit as proposed. It is apparent that, even if the existing units could be refurbished, their capacity will not add much value to the system in terms of back up or emergency generation. The Board also notes the environmental concerns identified by NP associated with the existing units in terms of fuel handling and storage. It is the Board's view the expected useful life of the existing units is limited based on their age and condition.

The Board also notes its direction to NP in Order No. P.U. 1(1998-99) in which the Board dealt with the removal of certain diesel generating plants from service, including the diesel generating plant at Port aux Basques. In this Order the Board consented to the removal of the Port aux Basques plant as soon as practical after the commissioning of Rose Blanche Brook hydroelectric plant. In addition the Board also ordered that "*the diesel generating unit #10 at Port aux Basques, as well as the portable diesels currently stationed at the Grand Bay Substation, remain operational and maintained at their respective sites and that the portable units be relocated to other locations only in the event of an emergency*". On the basis of the information before it the Board is satisfied that NP has complied with this directive. The Board is not satisfied that the circumstances in terms of service reliability under which the 1998 order was made have changed and will require the new 2.5 MW unit to be stationed in Port aux Basques.

The Board will approve the proposed improvements and additions in relation to Energy Supply in the amount of $7,076,000. Unless otherwise directed by the Board, the 2.5 MW portable diesel unit being purchased will be required to be stationed in Port aux Basques unless required for emergency purposes or for planned construction activity.

ii) Substations

This category consists of a number of projects targeted at some of NP's 137 substations, including rebuilds, replacement of deteriorated and/or obsolete equipment, and improvements to monitoring and protection equipment. The budget also includes expenditures to add transformers to the Virginia Waters and Chamberlains substations at a cost of $1,150,000 and $1,250,000 respectively. In addition an amount of $1,200,000 is proposed for continuation of a feeder remote control project that was initiated in 2002. This project involves replacing a number of aging, limited function, electronmechanical feeder relays and oil-fired reclosers with modern multi-function electronic relays and reclosers that can be remotely controlled from the System Control Centre.

Projects that were questioned extensively in this category were the addition of the transformers at the Virginia Waters and Chamberlain substations. The CA questioned the need for these transformers and suggested that an upgraded transformer be used in these substations rather than putting in additional units.

The addition of power transformers at the Virginia Waters and Chamberlains substations was justified by NP on the basis of customer growth, with NP stating that these areas are two of the highest growth areas in its service territory. NP also submits that the additional transformer capacity to be installed at these substations will enable the company to continue to carry the entire substation load in the event of the failure of another substation transformer, except at times of peak load. A third 66/12.5kV 25 MVA transformer is proposed to be added to the Virginia Waters substation and a second 66/25kV 25 MVA is proposed for the Chamberlains substation.

NP has also indicated that the peak load at the Chamberlains substation has exceeded the nameplate capacity of the existing transformer, and that continuing to operate at +100% is not recommended. At the Virginia Waters substation the peak load on one of the two existing transformers is forecast to exceed its nameplate capacity in 2003 and the other transformer is approaching its nameplate capacity. The addition of these transformers will also provide greater operating flexibility at these substations.

The Board is satisfied that the proposal to add these transformers is justified on the basis of the projected customer growth and the existing operating loads at both substations.

The Board will approve the proposed improvements and additions in relation to Substations in the amount of $5,887,000.

iii) Transmission

This category consists of projects aimed at rebuilding various transmission lines on NP's system ($4,129,000) and also included an amount of $500,000 for a Transmission System Engineering Study.

A number of questions were asked regarding NP's proposal to rebuild 11 km of the 66kV transmission line 24L which, along with the 66 kV line 17L. connects customers on the Southern Shore to the grid via the Goulds Substation. In its response to CA-28, NP stated that climbing inspections of both these transmission lines indicated the need for extensive upgrading, raising both reliability and safety concerns. NP has also indicated that, from a reliability perspective, one transmission line serving the Southern Shore is sufficient given the number of hydro plants and the load in the area. Since 17L would require more extensive upgrading NP has decided to focus on 24L and to retire 17L from service. On the basis of the information before it the Board accepts NP's proposal to upgrade 24L and to retire 17L from service. On-going monitoring by the Board of reliability and outage statistics will show whether the Southern Shore area is adversely affected by this decision.

NP has also proposed an expenditure of $500,000 for a transmission system engineering study which is described as "*a detailed engineering study that will analyze opportunities to significantly improve the reliability of electrical service to customers served by radial transmission lines in the Old Perlican/New Chelsea area and the Port aux Basques/Rose Blanche area*." The study is intended to include an evaluation of alternatives, such as the creation of a looped transmission system or the addition of generating facilities, as well as the detailed engineering necessary to determine the costs of the recommended solutions in preparation for possible construction in 2004. The $500,000 costs are broken down evenly with $250,000 allocated to each study area.

The CA argues that NP has not provided sufficient justification for the study on the basis that the reliability statistics, particularly in the Port aux Basques area, do not seem warrant such a study. The CA also pointed to the fact that there have been considerable expenditures in the Port

aux Basques area in recent years aimed at improving the reliability for customers, including $14,000,000 on the Rose Blanche Brook hydroelectric development in 1998, which was justified at the time on the basis of improving reliability. In addition, it was pointed out that NLH has applied to the Board for approval of an expenditure in 2003 of $2,946,000 to complete upgrade work on TL214, which is the transmission line that services the Port aux Basques area.

On the basis of the information before it the Board is not prepared to approve this expenditure of $500,000. The Board points to differing project scopes outlined in the responses to information requests, and an insufficient breakdown of project costs which does not seem to correspond to the study purpose. For example, the proposed expenditure includes amounts for land acquisition and environmental preview reports, which, in the Board's opinion, are not properly a part of a study of alternatives as described by NP. In addition, it was indicated during the hearing that in its 2003 capital budget application NLH has applied for approval of $2,946,000 to undertake work on TL214 to address reliability problems in the Port aux Basques area. It was not clear to what extent this work, when complete, will help in addressing the reliability issues in the Port aux Basques area that NP proposes to examine in its transmission system study. While the Board notes such a study may or may not be warranted, the information provided appears to be conflicting and insufficient to justify approval at this time. The Board will accept a supplementary capital budget application from NP for this study but such an application should include a complete description of the reliability issues for each area to be studied, including the expected impact of NLH's work on TL 214, and a more comprehensive breakdown of the study components and the outcomes expected at each stage, along with their associated costs.

The Board does not approve the expenditure of $500,000 for the Transmission System Engineering Study. The Board will approve the proposed improvements and additions in relation to Transmission in the amount of $4,129,000.

iv) Distribution

The proposed expenditure in the Distribution category of $25,707,000 represents 46 percent of NP's capital budget for 2003. This category includes proposed expenditures of $11,790,000 related to customer growth in the areas of line extensions, transformers, meters and

services. While the budget is estimated based on historical data the amount spent in each area will depend on actual customer growth. The budget for transformers also includes provision for replacement of deteriorated and damaged transformers, and for capacity upgrades for existing customers.

The Distribution category also includes several projects focused on upgrading and maintenance of NP's distribution lines. An amount of $2,745,000 has also been proposed for reconstruction, which involves replacement of deteriorated or damaged equipment that is identified during line inspections or reflect operational problems. This amount is estimated based on historical expenditures related to unplanned repairs, and includes an allowance for the estimated cost of anticipated requirements of Aliant Telecom Inc. with respect to joint-use poles. An amount of $3,504,000 is budgeted for rebuilding distribution lines that have been identified as being in need of repair based on their physical condition. An amount of $1,078,000 has been included as part of the distribution reliability initiative, which targets those distribution lines with below average reliability. NP plans to focus in 2003 on the distribution feeders in Glovertown (GLV002), Long Lake (LGL-02) and Milton (MIL-02).

Other specific projects identified in this category include an allocation of an amount of $275,000 for relocating/replacing distribution lines for third parties, improving distribution system protection/operation ($457,000), and switch replacement and upgrade underground distribution on Water Street in St. John's ($762,000). An amount of $100,000 is also included for interest during construction calculated in accordance with Order No. P.U. 37 (1981).

There were no specific issues raised during argument concerning any of these projects and the Board is satisfied that the proposed expenditures are necessary and reasonable.

The Board will approve the proposed improvements and additions in relation to Distribution in the amount of $25,707,000.

v) General Property

This category includes an expenditure of $770,000 for replacement of tools and equipment for line and support staff, as well as the replacement or addition of office furniture and equipment. An amount of $140,000 is also proposed for maintaining buildings and facilities.

This category also includes an allowance of $750,000 for unforeseen expenditures not budgeted elsewhere.

The CA raised the issue of budget allocated for unforeseen items and the level of this allowance to be set by the Board.

NP provided an explanation of the operation of the Allowance for Unforeseen Items account in CA-44 (c) where it is stated: " *The purpose of the account is to permit the company to act expeditiously to deal with events affecting the electrical system in advance of seeking specific approval of the Board. It would not be practical in these situations for the Company to delay making capital expenditures, which may be in excess of $50,000, to restore service while awaiting Board approval*." Under cross-examination Mr. Ludlow referred to the Allowance for Unforeseen Items as "an enabler or a trigger" to allow NP to react quickly to respond to restoration of power and stay within the spirit of the *Act*. This explanation agrees with the Board's intention of the use of this account, which was put in place to allow NP to proceed with repairs in emergency situations without being in contravention of section 41(3) of the *Act*. The Board also notes that the variance in this account for the last number of years has been ($750,000) meaning that NP did not have any expenditures allocated to this budget item. Where the account has been used, the expenditures are subsequently allocated to the appropriate budget category for end of year reporting.

With regard to the argument of the CA that the budget of $750,000 in the Allowance for Unforeseen Items account be reduced, the Board is not convinced such a reduction is necessary. NP is not able to predict the level of expenditure which might be required to restore power in the event of an emergency but, based on recent experiences with lightening damage, NP submits $750,000 is a reasonable allocation for most situations. If the provisional amount is not needed, the money is not spent. Alternatively, if more than $750,000 is required to respond to an extraordinary or catastrophic event, customers will not benefit from a downward adjustment in this account. NLH has a similar capital budget account approved by the Board which is set at $1,000,000 and is intended to operate in the same manner. The Board also acknowledges, even with the recently implemented insurance policy respecting storm damage on transmission and distribution lines, the Allowance for Unforeseen Items would still be necessary to effect the emergency repairs until the insurance claim is processed.

The Board will approve the proposed improvements and additions in relation to General Property in the amount of $1,660,000. The Board will, however, require NP to separate the budgeting for General Property and the Allowance for Unforeseen Items and to report the actual expenditures and variances separately. This is consistent with NLH's reporting and will provide for easier tracking of the General Properties category expenditures.

vi) Transportation

This budget category includes an amount of $2,141,000 for the replacement of passenger vehicles and line trucks. NP plans to purchase 48 passenger/off road vehicles at a cost of $866,000 and 7 heavy fleet vehicles at a cost of $1,275,000. The passenger/off road vehicles include cars, light duty trucks, snowmobiles, ATVs and trailers.

The CA raised a number of issues regarding this proposed expenditure. It was argued that the budget for replacement vehicles could be reduced by $300,000 because NP has an overabundance of vehicles. As well the replacement criteria for vehicles was questioned, with the CA suggesting that, with better warranties available, NP should be able to get more use out of their vehicles. Finally, the CA objected to NP's policy on personal use of company vehicles, arguing that the use of vehicles should be tied to the provision of electrical service.

NP provided considerable information on this issue through responses to information requests and other undertakings filed for the CA during the hearing.

The Board is not convinced the 2003 budgeted expenditure for vehicles should be reduced. NP has indicated that these expenditures are for replacement vehicles only and that no additional vehicles are being purchased. The Board notes that since 1997 NP has reduced the total number of vehicles in its fleet by 23%, from 536 to 414.

On the question of whether the replacement criteria itself is encouraging early or unnecessary replacement of vehicles, the Board has insufficient evidence to indicate this is the case. In response to CA-45 (f) NP provided information on the vehicle replacement criteria used by NLH as filed in NLH's 2001 General Rate Application. The CA suggested that this information shows that NLH is able to get more use out of their vehicles than NP. NLH uses a 5-7 year/>150,000 km replacement cycle for passenger vehicles considering maintenance cost

and condition. NP uses an assessment of the remaining useful life of each vehicle as the basis for the decision for replacement, taking into account the overall condition, maintenance history and immediate repair requirements. According to NP the average life span of its passenger vehicles is 5 years or 150,000 km and for heavy fleet vehicles the average life span is ten years or 200,000 km. In reviewing CA-45 (a), it is clear that the vehicles being replaced will, in almost all cases, be older than 5 years as of 2003 and will have odometer readings of over 150,000 km. When considering the maintenance costs in addition to the age and mileage the Board is satisfied that the proposed replacements are reasonable and prudent.

In CA-45 (g) NP provided a copy of its policy for personal use of company vehicles. This policy clearly refers to the use of vehicles by employees while on stand by, which the Board accepts as being directly related to the provision of electrical service. For those employees the policy states clearly that "*the use of company vehicles for other than business purposes will be restricted to incidental usage*." The Board does not take any issue with the need for standby employees to have immediate access to a vehicle in order to respond to an emergency call. It is not clear from the evidence and Mr. Ludlow's testimony on cross-examination by the CA, that the company enforces restrictions on incidental usage or whether employees have access to company vehicles when they are not on standby. For example Mr. Ludlow indicated in response to a question from the CA that he might not restrict an employee from taking such a vehicle off island for personal use. The Board expects NP to restrict the use of company vehicles by employees to necessary usage related to the provision of electrical service and to not allow personal use of company vehicles by employees except for incidental use while on standby as covered by the policy.

The issue of the potential costs associated with the use of company vehicles for personal use by employees where the vehicle is not part of the employee's compensation package or where the employee is not on standby status can be more appropriately dealt with as part of the Board's review of operating expenses. The Board agrees that regulated expenses relating to vehicles should only include those expenses that are related to the provision of electrical service. The Board may request additional evidence on this issue as part of NP's General Rate Application.

The Board will approve the proposed improvements and additions in relation to Transportation in the amount of $2,141,000.

vii) Telecommunications

This category includes an expenditure of $242,000 to replace or upgrade communications equipment and an amount of $141,000 to install substation telephone circuit protection. There were no specific concerns raised regarding this budget category or the projects proposed by NP.

The CA did raise the issue of potential sharing by NP of NLH's VHF mobile radio system. This issue was also raised during NLH's 2001 General Rate Application. NP has included in its 2003 budget an amount of $25,600 for the replacement of 20 VHF Mobile Radio units and $10,000 for the replacement of 10 VHF Portable Radio units. Upon questioning from the CA NP confirmed that NLH does have a similar VHF system. On the issue of NP sharing NLH's VHF radio system, NP stated that this option is not cost effective for them and they are not prepared to enter into such an arrangement at this time.

NLH had proposed to replace its entire VHF Mobile Radio system in their capital budget application for 2002 at a total cost of $8,700,000 spread over two years. In P.U. 7 (2002-2003) the Board did not approve this project, requiring NLH to file further justification. NLH did not apply for Board approval of this project in its 2003 capital budget application but did confirm during this proceeding that it plans to reapply as part of its 2004 capital budget application to Board. The Board also ordered NLH to file by December 31, 2002, a final report on the results of joint efforts to date to reduce duplication between NP and NLH. The Board has been made aware that there have been discussions on this issue between the utilities. Any further consideration of the issue of duplication and sharing of resources will only be taken after receipt of this report.

The Board is cognizant of the safety issues involved and the importance of personnel having access to a reliable communications system. The Board does not regard NP's proposed purchase of 30 VHF Radio units at a cost of $35,000 to be unreasonable.

The Board will approve the proposed improvements and additions in relation to Telecommunications in the amount of $383,000.

viii) Information Systems

This budget category consists of a number of projects relating to the information systems and computer technology infrastructure. The total expenditure proposed is $5,507,000. The Board notes that the proposed budget of $5,507,000 represents 9.9% of the total capital budget or 10.6%, if the expenditures relating to the purchase of joint-use poles from Aliant is excluded.

A number of issues were raised with respect to this category. It was suggested by the CA that the budget for Information Systems is too high or has been over-stated. The CA argues that NP has over budgeted in this expenditure category in the past and that the Board should disallow a portion of the budget for Information Systems. The CA points to information in Table 1 of CA-50 (c) on internet enhancements, stating that this information shows in every year except 2001 the budget presented by NP is significantly higher than that actually spent. It was suggested that a reduction of $50,000 would be warranted for this category. The CA also questioned the unit cost of $4,500 identified for replacement of 17 laptops, suggesting that this expenditure might be overstated by $36,000 to $40,000. In final argument the CA stated that NP has in the past five years over budgeted in the area of Information Systems by $260,000.

In terms of specific projects the CA took issue with NP's computer inventory and the expenditure related to internet enhancements. With respect to the computer inventory the CA suggests that NP has an over supply of personal computers and points to the fact that NP retained 68 computers in 2002 that were designated to be retired. In the CA's view this fact should raise a question of whether NP actually needs the 140 computers for which it has requested expenditure approval in 2003. In the area of internet enhancements it was suggested by the CA that the $60,000 expenditure related to internet enhancements is not a necessary expense since it only benefits 30-40 percent of NP's customers who have access to the internet.

As the CA pointed out during final argument, the Board dealt with the issue of NP's increasing expenditures in information technology in 1998. In P.U. 36 (1998) the Board required NP to file a report on the company's information technology strategy for the period 1999 to 2002, identifying planned expenditures, expected productivity gains and cost savings, and other benefits the company may realize as a result of these expenditures. This report which was filed in response to NLH-28, projected expenditures for 2002 of $4,750,000, compared to a forecast expenditure of $6,279,000 (CA-2), and a budget of $6,298,000 approved by the Board. The

Board notes that many of the Information Systems projects in the 2003 budget relate to new projects aimed at addressing the risk of continuing to use the OpenVMS platform upon which many of NP's applications are supported, in particular the Customer Service System Study ($170,000), projects in the Facilities Management budget ($562,000), the Operations Support Systems ($383,000), and the Outage Management project ($282,000). The overall budget of $5,507,000 would be reduced to approximately $4,100,000 without these projects, comparable with the budgets of 1999 and 2000.

The Board also points to CA-2, which shows the variances since 1993 in the budget and actual expenditures for Information Systems. The Board does not agree that this information shows a consistent over budgeting since 1998 by NP in this expenditure category. During this period the variances range from 9% under budget in 2000 to an over budget of 19% in 1998. The Board has been provided with reasons for the variances in the capital budget variance reports filed with the Board each year and its Financial Consultants review the variances as part of the annual financial reviews. The Board has insufficient evidence to make a finding of consistent over budgeting and will not order a reduction in this expenditure area on that basis. The Board is of the view, however, that an update of the Information Technology Strategy Report should be prepared by NP.

Based on the information provided in CA-103 (b) regarding computer inventory and replacement practices at other utilities, the Board is satisfied that NP does not maintain excess computers or replace them at a rate that would encourage unnecessary retirements. Compared to other utilities NP appears to have what the Board would consider a "middle of the road" approach to its management of its personal computer infrastructure.

The Board will approve the proposed improvements and additions in relation to Information Systems in the amount of $5,507,000. The Board will order NP to file an updated Information Technology Strategy Report for the period 2004-2008 as part of its 2004 Capital Budget application.

ix) General Expenses Capital

The 2003 Capital Budget includes an amount of $2,800,000 for General Expenses Capital (GEC). The source of the items in the GEC account is direct charges to GEC and amounts

allocated from specific operating accounts. NLH-41 provides a breakdown of the forecast GEC for 2003.

NLH questioned NP about the calculation of the GEC, specifically with respect to the labour cost component. There was no evidence presented to indicate that the calculation of the GEC as presented by NP should be adjusted.

Over the period January 1, 1995 to December 31, 1999 NP has been moving from a full cost method to an incremental cost method of allocating costs to GEC based on Order No. P.U. 3 (1995-96). This has resulted in a decrease in the amount of GEC from a level of $10,500,000 in 1995 to $2,500,000 in 2002. The Board's financial consultants Grant Thornton have reviewed this account as part of their annual financial reviews and confirm that NP is in compliance with Order No. P.U. 3 (1995-96).

The Board is satisfied that the calculation of the amount to be allocated to GEC is in accordance with Order No. P.U. 3 (1995-96) and will approve the $2,800,000 included in the 2003 Capital Budget.

3. 2003 CAPITAL BUDGET

Before dealing with the 2003 Capital Budget the Board feels there is merit in reviewing the overall level of the Capital Budget in relation to previous years. CA-1 sets out a summary of NP's capital budget expenditures since 1993. In final argument NP explains that in the five (5) year period from 1998 to 2002 the annual capital budget averaged $49.4 million, whereas historically over the past twenty (20) years the capital budget has ranged from a low of $30.9 million in 1996 to a high of $68.02 million in 1990. NP points to CA-72(d) which outlines average capital budget per customer expenditure, as follows: 1990 -$354; 1992 - $240; 1996 - $148; and forecast 2003 - $253 ($235 excluding Aliant). In describing NP's future budgetary directions, Mr. Hughes estimated annual capital expenditures in the $50-$60 million range over the next three years assuming inflation stays much the same and excluding the Aliant pole purchase. Mr. Hughes suggested beyond this timeframe he would not be certain of any projections.

In final argument the CA questioned the expansion of the capital budget in relation to historic levels. The CA also suggested that NP is assisting with the growth of its capital

expenditures through corporate advertising in direct violation of Order No. P.U. 6 (1991) and pointed to various examples of NP printed ad material to demonstrate his point. In addition, the CA expressed concerns in final argument regarding the level of the variance of actual versus budgeted expenditures by category (e.g. substations, distribution, transmission, etc.).

Mr. Hughes stated that NP does not engage in advertising for purposes of increasing the use of electricity but rather provides factual information on such areas as conservation and pricing of electricity. In direct examination Mr. Ludlow reviewed 2002 budgetary variances by category and explained particular circumstances which contributed to specific variances.

The Board does not believe NP is in violation of Order No. P.U. 6 (1991) based on its advertising expenses.

In examining NP's historic level of capital expenditures, the Board is, however, cognizant of the stepwise increase evidenced in certain years and the resulting new level of expenditures or trending established and continued into the following years. NP explained the increase in its 1998 capital budget resulted from under investment during the period 1993 to 1997 due to the economic downturn associated with the cod moratorium. The capital program expenditure fluctuated around the 1998 level until 2002, when another sharp increase in capital expenditure occurred, which is being further expanded into 2003 as proposed in this Application. Excluding the Aliant joint-use pole purchase, the Board notes capital expenditures have grown more than 17%[3] over the past two (2) years and in excess of 67%[3] over the last six (6) years. Given the current 2003 capital budget application of $51,746,000 (excluding Aliant) and Mr. Hughes' assessment that the comparable figure could range in the next 2-3 years between $50-60 million assuming constant inflation, the potential for further step increases in capital expenditure patterns exist.

While acknowledging annual budgetary versus actual variances are reported to the Board with explanations, the Board believes more stable and predictable year over year capital budgets for NP is a desirable objective which will assist in fostering stable and predictable rates for consumers into the future. The Board understands the uncertainties associated with inflation rates and other exigencies faced by the utility but maintains improvements should be pursued in stabilizing expenditure patterns.

---

[3] Based on 2001 and 1997 actuals of $44,203,000 and $30,965,000 respectively.

Accompanying its 2004 capital budget application, NP will be directed to provide to the Board a plan for maintaining the stability of the capital budget and the capital works program over the ensuing five (5) year period. The plan will include an analysis of capital expenditures, both budgeted and actual, over the previous 10 years and will give an indication of the pattern of expenditures for each budgetary category and for the overall budget, along with a full explanation of the reasons for changes in expenditure patterns. The plan should assess maximum budget growth and a contingency for unexpected or unusual events during the period.

After consideration of the historical capital expenditure levels and review of the evidence surrounding the individual budget categories and projects, the Board accepts NP's proposed capital expenditures for improvements and additions to its property with the exception of the Transmission System Engineering Study in the amount of $500,000, which the Board found was not sufficiently justified.

The Board will approve a 2003 capital budget in the amount of $55,290,000 for improvements and additions to NP's property pursuant to section 41(1) of the *Act.*

IV. 2001 RATE BASE

The rate base consists mainly of fixed assets upon which, pursuant to the *Act*, the company is allowed to earn a return. Capital expenditures that are approved by the Board annually increase the rate base, and depreciation expense approved by the Board causes the rate base to decrease.

Schedule F of the Application shows the calculation of the average rate base for 2001 at $545,162,000. NP indicated the rate base for 2001 increased over 2000 principally due to the 2001 capital program, including a $20 million expenditure related to the purchase of joint-use poles from Aliant.

With respect to the calculation of rate base, NP in final argument refers to the response to CA-124 (d) outlining Grant Thornton's 2001 Annual Financial Review to the Board. NP highlighted Grant Thornton's conclusion that the 2001 average rate base is accurate and in accordance with established practice. NP noted the company's 2000 rate base was approved in Board Order P.U. 21 (2001-2002) and capital expenditure for 2001 was approved in Orders P.U.

24 (2000-2001), and P.U. 12 (2001-2002). In addition, NP indicated the Board specifically approved the capital expenditures which are included in the 2001 rate base related to the Aliant pole purchase in a separate Order, P.U. 17 (2001-2002). NP concluded all other elements of the rate base for 2001, that's the accumulated depreciation, contributions in aid of construction, weather normalization, cash work and capital allowance, materials and supplies, were all calculated in accordance with Board Orders, and Board approved policies, and accordingly, the fixing and determining of the 2001 rate base is a regulatory approval which should be granted in the normal course, as it was for the year 2000, and for the year 1999.

The CA in final argument points to the decision taken by the Court in the Stated Case recognizing that regulatory boards have a wide discretion to disallow or adjust the components of rate base and expense. The CA references CA-62 and CA-72 to demonstrate the increased trending in absolute and per customer rate base, which has occurred between 1998 and 2003. The CA concludes the figures are startling and improvements in SAIFI and SAIDI statistics exhibited in CA-104 (a) have not been commensurate. The CA uses the upward trend in the Information System budget as an example of where NP may be unnecessarily overcapitalizing and adding to its rate base.

The Board concurs it has discretion pursuant to section 78 of the *Act* to fix and determine the rate base. The Board was presented with insufficient evidence to make any adjustments to the 2001 rate base outlined in Schedule F.

The Board is satisfied that the average rate base of $545,162,000 included in the company's annual report and reproduced in the Application is accurate and in accordance with the established practice as verified by Grant Thornton in its 2001 Annual Financial Review conducted for the Board.

Pursuant to section 78 of the *Act*, the Board will fix and determine NP's average rate base for 2001 at $545,162,000.

V. ORDER

IT IS THEREFORE ORDERED THAT:

1. **Pursuant to section 41(3) of the *Act,* improvements and additions to NP's property are approved as follows:**
    a. **Construction and purchases in excess of $50,000, as set out in Schedule A attached to this Order; and**
    b. **Leases in excess of $5,000, as set out in Schedule B attached to this Order.**

2. **A 2003 capital budget for improvements and additions to NP's property in the amount of $55,290,000 is approved pursuant to subsection 41(1) of the *Act.***

3. **Unless otherwise directed by the Board, the 2.5 MW portable diesel unit to be purchased in 2003 will be stationed in Port aux Basques unless required for emergency purposes or for planned construction activity.**

4. **Unless otherwise directed by the Board, NP shall follow the guidelines as set out in Schedule C attached to this Order, which may be amended from time to time by the Board.**

5. **Unless otherwise directed by the Board, NP shall separate the budget categories for General Properties and Allowance for Unforeseen Items and report budget, actual and forecast expenditures separately for these categories.**

6. **Unless otherwise directed by the Board, NP shall provide in conjunction with the 2004 Capital Budget application, a status report on the 2003 capital expenditures showing for each project:**

i) the approved budget for 2003;
ii) the expenditures prior to 2003;
iii) the 2003 expenditures to the date of the application;
iv) the remaining projected expenditures for 2003;
v) the variance between the projected total expenditures and the approved budget; and
vi) an explanation of the variance.

7. As part of its 2004 Capital Budget Application, NP shall file an updated Information Technology Strategy report for the period 2004-2008.

8. Unless otherwise directed by the Board, NP shall file a "Capital Budget Plan" as part of its 2004 Capital Budget Application which should include:

a. An analysis of capital expenditures, both budgeted and actual, for the period 1993-2003;
b. A breakdown of the expenditure patterns for each budget category and for the overall capital budget for each year;
c. A full explanation of the reasons for the changes in expenditure patterns over the period 1993-2003; and
d. A five (5) year plan for maintaining the stability of the capital budget and the capital works program, including an assessment of maximum budget growth and a contingency for unexpected or unusual events during the period.

9. NP shall file an annual report to the Board on its capital expenditures within sixty (60) days after the end of the year 2003.

10. The rate base for the year ending December 31, 2001 is hereby fixed and determined at $545,162,000 pursuant to section 78 of the *Act*.

11. NP shall pay all costs and expenses of the Board incurred in connection with the Application.

DATED at St. John's, Newfoundland and Labrador, this 23rd day of December, 2002.

Robert Noseworthy,
Chair & Chief Executive Officer.

Darlene Whalen, P.Eng.,
Vice-Chairperson.

John William Finn, Q.C.
Commissioner.

G. Cheryl Blundon,
Director of Corporate Services and
Board Secretary.

Newfoundland Power Inc.
2003 Capital Budget

ENERGY SUPPLY

	(000s)
HYDRO PLANTS - FACILITY REHABILITATION	$2,345
THERMAL PLANTS - FACILITY REHABILITATION	1,561
PENSTOCK REPLACEMENT - LOCKSTON	1,520
PURCHASE PORTABLE DIESEL GENERATION	1,500
MAJOR ELECTRICAL EQUIPMENT REPAIRS	150
TOTAL - ENERGY SUPPLY	**$7,076**

Newfoundland Power Inc.
2003 Capital Budget

SUBSTATIONS

	(000s)
REBUILD SUBSTATIONS	**$**557
REPLACEMENT AND SPARE SUBSTATION EQUIPMENT	1,107
RELIABILITY AND POWER QUALITY IMPROVEMENTS	198
SUBSTATION PROTECTION AND MONITORING IMPROVEMENTS	425
DISTRIBUTION SYSTEM - FEEDER REMOTE CONTROL	1,200
VIRGINIA WATERS - ADD 66/12.5 kV TRANSFORMER	1,150
CHAMBERLAINS - ADD 66/25 kV TRANSFORMER	1,250
TOTAL - SUBSTATIONS	**$5,887**

Newfoundland Power Inc.
2003 Capital Budget

TRANSMISSION

	(000s)
REBUILD TRANSMISSION LINES	$4,129
TOTAL - TRANSMISSION	**$4,129**

Newfoundland Power Inc.
2003 Capital Budget

DISTRIBUTION

	(000s)
EXTENSIONS	4,322
METERS	674
SERVICES	1,819
STREET LIGHTING	952
TRANSFORMERS	4,975
RECONSTRUCTION	2,745
ALIANT POLE PURCHASE	4,044
TRUNK FEEDERS	
Rebuild Distribution Lines	3,504
Relocate/Replace Distribution Lines For Third Parties	275
Distribution Reliability Initiative	1,078
Improve Distribution System Protection/Operation	457
Switch Replacement & Upgrade Underground Distribution - Water Street, St. John's	762
INTEREST DURING CONSTRUCTION	100
TOTAL - DISTRIBUTION	$**25,707**

Newfoundland Power Inc.
2003 Capital Budget

GENERAL PROPERTY

	(000s)
TOOLS AND EQUIPMENT	$770
ADDITIONS TO REAL PROPERTY	140
ALLOWANCE FOR UNFORESEEN ITEMS	750
TOTAL - GENERAL PROPERTY	**$1,660**

Newfoundland Power Inc.
2003 Capital Budget

TRANSPORTATION

	(000s)
PURCHASE OF VEHICLES AND AERIAL DEVICES	**$**2,141
TOTAL - TRANSPORTATION	**$2,141**

Newfoundland Power Inc.
2003 Capital Budget

TELECOMMUNICATIONS

	($000s)
REPLACE/UPGRADE COMMUNICATIONS EQUIPMENT	242
SUBSTATION TELEPHONE CIRCUIT PROTECTION	141
TOTAL – TELECOMMUNICATIONS	**$383**

Newfoundland Power Inc.
2003 Capital Budget

INFORMATION SYSTEMS

	($000s)
APPLICATION ENHANCEMENTS	$766
APPLICATION ENVIRONMENT	755
CUSTOMER SERVICE SYSTEM STUDY	170
FACILITIES MANAGEMENT	562
NETWORK INFRASTRUCTURE	542
OPERATIONS SUPPORT SYSTEMS	383
OUTAGE MANAGEMENT	284
PERSONAL COMPUTER INFRASTRUCTURE	634
SHARED SERVERS INFRASTRUCTURE	1,411
TOTAL - INFORMATION SYSTEMS	**$5,507**

ENERGY SUPPLY

HYDRO PLANTS
FACILITY REHABILITATION

Project Cost

$2,345,000

Nature of Project

This project is necessary for the replacement or rehabilitation of deteriorated hydro plant components that have been identified through routine inspections. It also includes expenditures necessary to improve the efficiency and reliability of the hydro plants or to maintain environmental compliance.

The project involves:

a) replacement/rehabilitation work at 17 of the Company's 23 hydroelectric plants. The work includes the replacement or rehabilitation of various retaining walls, dams, bridges, a power house crane and cooling coils.

b) work related to plant efficiency, reliability or the environment. The work includes the addition of fisheries habitat and replacement of programmable logic controllers (PLC) and governors at various hydroelectric plants.

The following table lists the projects for 2003:

Project	Cost (000s)
Dam rehabilitation - Seal Cove, Blackwoods & Whirl Pond	319
Generator, governor & PLC replacement at various plants	686
Communication cable & remote terminal unit replacement - Morris	255
Building rehabilitation - Petty Harbour	106
Bridge replacement - Cape Pond	90
Canal rehabilitation - Lockston	80
Fisheries habitat - various plants	50
Cooling coil, controls and filter replacement - various plants	68
Ventilation louver and heating replacement - various plants	90
Dam spillway rehabilitation - various plants	198
Various projects < $50,000	403
Total	**$2,345**

HYDRO PLANTS
FACILITY REHABILITATION (Cont'd)

There are approximately 15 projects in the <$50,000 category. They range in value from $5,000 to conduct an assessment of the turbine runner at Seal Cove to $45,000 to install a communications cable between the plant and the forebay at Tors Cove. In general, these 15 projects are similar in nature to those listed in the table except that they are on a smaller scale.

Customer Impact

These facilities provide energy to the Island Interconnected electrical system. Maintaining these generating facilities and infrastructure reduces the need for additional, more expensive, generation capacity.

Project Justification

The Company's 23 hydroelectric plants range in age from the 102 year old Petty Harbour Plant to the 4 year old Rose Blanche Plant. The average age is 57 years.

Projects involving replacement and rehabilitation work which are identified during ongoing inspections and maintenance activities are necessary to the continued operation of hydroelectric generation facilities in a safe, reliable and environmentally compliant manner. The alternative to maintaining these facilities would be to retire them. These facilities produce a combined average annual production of 426 GWh. Replacing only the energy produced by these facilities by increasing production at the Holyrood generation facility would require approximately 700,000 barrels of fuel annually. At current oil prices ($28/bbl), this translates into approximately $20 million in annual fuel savings. Maintaining these generating facilities also contributes to system stability and, in many cases, provides local backup generation.

All significant expenditures on individual hydroelectric plants, such as the replacement of penstocks, surge tanks, runners, or forebays, are justified on the basis of maintaining access to hydroelectric generation at a cost that is lower than the cost of replacement options.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

THERMAL PLANTS
FACILITY REHABILITATION

Project Cost

$1,561,000

Nature of Project

This project is necessary for the replacement or rehabilitation of deteriorated thermal plant (diesel and gas turbine) components that have been identified through routine inspections. It also includes expenditures necessary to improve the safety and reliability of the thermal plants or to enhance environmental compliance.

The following table lists the projects for 2003:

Project	Cost (000s)
Governor and control logic replacement - portable gas turbine	975
Exhaust stack replacement - Greenhill Gas Turbine	550
Install remote control for the Port aux Basques diesel	36
Total	**$1,561**

Customer Impact

These facilities benefit customers by ensuring the availability of backup power when supply from the electrical system is interrupted.

Project Justification

The 7.5 MW portable gas turbine located at Port aux Basques is 28 years old. The air intake structure and the governor have deteriorated and need to be replaced. There is minimal support available from the manufacturer of the governor and spare parts are not readily available. If the governor and the air intake structure are not replaced, the ability to operate the plant is compromised.

THERMAL PLANTS
FACILITY REHABILITATION (Cont'd)

An alternative to maintaining this facility would be to retire it. The facility currently provides approximately 7.5 MW of backup generation capacity. Replacement of this capacity would cost in excess of $1,000,000 per MW utilizing existing sites. Therefore, the replacement cost of the facility would be approximately $7,500,000.

The 25 MW gas turbine at Greenhill is 24 years old. A recent review by the Company and the equipment manufacturer, Rolls Royce, has determined that, in order to keep the plant in operation, the deteriorated exhaust stack needs to be replaced.

An alternative to maintaining this facility would be to retire it. The facility currently provides approximately 25 MW of backup generation capacity. Replacement of this capacity would cost in excess of $1,000,000 per MW utilizing existing sites. Therefore, the replacement cost of the facility would be approximately $25,000,000.

These projects ensure the continued operation of Newfoundland Power's existing thermal generation facilities in a safe, reliable and environmentally compliant manner. These plants are used to provide emergency power during system problems, to facilitate repair to radial systems and to help meet the system peak when one or more generation facilities are unavailable.

The existing Port aux Basques diesel can only be started locally. The personnel assigned to this task are also responsible for the operation of the portable gas turbine. This limits the Company's ability to start both generators in a timely fashion when they are both required. Installing remote control of the diesel generator will reduce the time required to restore service to customers by ensuring the plant is started as quickly as possible.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

PENSTOCK REPLACEMENT
LOCKSTON

Project Cost

$1,520,000

Nature of Project

This project is necessary to replace deteriorated equipment and involves the replacement of the 46-year-old wood stave penstock at the Lockston Hydroelectric Plant.

Customer Impact

This project will help minimize increases in electricity rates by maintaining existing hydro generation and avoiding the use of more expensive thermal generation.

Project Justification

The penstock at the Lockston plant is in a deteriorated condition. The penstock was constructed in 1956, and deficiencies were identified by independent experts' dam safety inspection reports as early as 1991. Since that time, operations staff has extended the operating life of the penstock by carrying out ad hoc repairs, such as the replacement of broken bands and wood staves and the plugging of water leaks as they appear.

In recent years, the frequency of repairs has increased to the point where further extension of the operating life of the existing penstock is no longer practical or safe. The Company had tentatively scheduled replacement of the penstock for 2006. However, during the last year, the need for immediate leakage maintenance has been increasing. Leaks are evident throughout the penstock length, most noticeably in the high-pressure lower section near the powerhouse. The excessive leakage, combined with poor site drainage, has resulted in a deterioration of the bedding materials upon which the penstock rests and, in some cases, erosion of penstock cradle foundations. In recent years, the structural integrity of the penstock has continued to deteriorate due to corroded bands and the separation of wood fibres within the staves. Replacement is now essential for the continued safe operation of the plant.

The alternative to replacing the penstock and maintaining this plant would be to retire the plant. This facility has an average annual production of approximately 8.4 GWh. Replacing only the energy produced by this facility by increasing production at the Holyrood generation facility would require approximately 14,000 barrels of fuel annually. At a cost of $28 per barrel, this translates into a fuel saving of approximately $400,000 annually.

PENSTOCK REPLACEMENT
LOCKSTON (Cont'd)

An economic analysis of the Lockston Hydroelectric system, considering the penstock replacement and the expected capital and operating expenditures required over the next 25 years, indicates a positive net present value.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

PURCHASE PORTABLE DIESEL GENERATION

Project Cost

$1,500,000

Nature of Project

The project consists of the purchase of a 2.5 MW portable diesel generation unit. The generator is required for emergency backup and will be stationed during the winter months at a radially fed substation. In the summer months, the unit will be moved as necessary to support construction or repair activities.

Customer Impact

The purchase of portable diesel generation is required to provide emergency backup by replacing portable generation that has reached the end of its useful life.

The project also contributes to reduced distribution and transmission construction costs by enabling the Company to maintain reasonable levels of electricity supply to customers during such construction.

Project Justification

Portable diesel generation is required for back up to ensure that a reasonable level of service can be provided to customers in emergency conditions.

Distribution feeder and radial transmission construction work is performed most cost-effectively when electrical circuits are de-energized. Portable generation enables the Company to maintain energy supply to customers while upgrade or repair work is performed on the de-energized electrical circuits. In addition, these units can be deployed to areas impacted by prolonged outages caused by major winter storms. As the generation unit will normally be connected to the electrical system, it can also be called upon when needed to support system capacity requirements.

Newfoundland Power presently has a total of 3 portable generation units, consisting of 1 portable gas turbine and 2 portable diesel generators. The portable gas turbine, which is rated at 7.2 MW, is located at Grand Bay Substation in Port aux Basques, except when it is required for emergencies or construction elsewhere. Portable Diesel #1, rated at 700 kW, and Portable Diesel #2, rated at 670 kW, are also located at Port aux Basques, except when they are required elsewhere. The transport chassis of Portable Diesel #2 is badly deteriorated, and the unit is no longer roadworthy. The Company plans to de-commission Portable Diesel #2 in 2003.

PURCHASE PORTABLE DIESEL GENERATION (Cont'd)

The Company also has a 2.5 MW diesel plant in St. John's. This plant was initially built to provide black start capability for the St. John's Thermal Plant. It was also available to provide some backup supply for the St. John's area, and to contribute to system capacity requirements. However, this plant has reached the end of its useful life, and the Company plans to de-commission it in 2003. The new portable diesel generator has the ancillary benefit of replacing most of the capacity that will be lost with the decommissioning of these aged, obsolete units.

This generator will be available to Newfoundland and Labrador Hydro ("Hydro") under the Equipment Sharing Agreement between Hydro and the Company.

The Company currently plans to locate the unit at a site during the winter which will maximize overall system reliability. An appropriate site would be one subject to severe winter weather conditions and currently served by a radial transmission system.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

MAJOR ELECTRICAL EQUIPMENT REPAIRS

Project Cost

$150,000

Nature of Project

This project is necessary to provide for the unanticipated cost of major equipment replacement or rehabilitation occasioned by deterioration or catastrophic failure. Major equipment includes transformers, generators and turbines. The project cost is based on an assessment of historical expenditures. For comparison purposes, a similar amount for this item was included in the 2002 Capital Budget.

Customer Impact

The project provides the funds to replace failed equipment to maintain or restore electrical service.

Project Justification

Past experience indicates that unforeseen equipment failures will occur. Projects covered by this budget item in the past include generator rewinding, power transformer rehabilitation, replacement of power connection cables and refurbishment of surge tank components.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

SUBSTATIONS

REBUILD SUBSTATIONS

Project Cost

$557,000

Nature of Project

This project is necessary for the replacement of deteriorated and substandard substation infrastructure, such as bus structures, poles and support structures, equipment foundations, switches and other equipment.

The following table lists the projects for 2003:

Project	Cost (000s)
Replace switch connectors - various substations	60
Re-terminate feeders aerially at Greenhill and Marystown Substations	109
Trepassey Substation upgrade	96
Safety clearances - regulators at Frenchman's Cove and Gillams Substations	60
Site & foundation upgrades at Blaketown, Clarenville and St. John's Main Substations as well as others identified through foundation inspections.	150
Projects < $50,000	82
Total	**$557**

There are 3 projects in the <$50,000 category. One involves the installation of a bypass switch at Monkstown Substation, the second involves rebuilding a section of Grand Beach Substation, and the third involves upgrading 404L terminations at Wheelers Substation.

Customer Impact

This project will maintain the reliability and continuity of electrical service and eliminate potential employee safety hazards associated with deteriorated substation infrastructure.

REBUILD SUBSTATIONS (Cont'd)

Project Justification

The Company has 137 substations varying in age from 1 year to 102 years. Equipment and structures that need to be replaced are identified as a result of monthly inspections, engineering studies and revisions to equipment standards. The project is justified by the need to replace deteriorated equipment identified through this process. These expenditures will ensure reliable service and address safety concerns.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

REPLACEMENT AND SPARE SUBSTATION EQUIPMENT

Project Cost

$1,107,000

Nature of Project

This project is necessary for the replacement of obsolete and/or unreliable electrical equipment and the maintenance of appropriate levels of spare equipment for use during emergencies.

The following table lists the projects for 2003:

Project	Cost (000s)
Replace deteriorated breakers & reclosers at Rattling Brook, St. George's and Pasadena Substations	353
Replace batteries & chargers	60
Replace step-up transformers at Fall Pond, West Brook and grounding transformers at Gander Substations	153
Replace transformer #2 cables at Hardwoods Substation	55
Replace oil filled equipment at Big Pond & King's Bridge Substation	136
Spare equipment	350
Total	**$1,107**

Customer Impact

This project provides for the ready availability of spare or replacement equipment to facilitate restoration of service following failure of a major component of the electrical system.

Project Justification

The Company has 137 substations. The major equipment items comprising a substation include power transformers, circuit breakers, reclosers, potential transformers and battery banks. In total the Company has approximately 190 power transformers, 400 circuit breakers, 200 reclosers, 500 potential transformers and 140 battery banks.

REPLACEMENT AND SPARE SUBSTATION EQUIPMENT (Cont'd)

The need to replace equipment is determined on the basis of tests, inspections and the operational history of the equipment. The provision of adequate levels of spare equipment is based on past experience and engineering judgement, as well as a consideration of the impact the loss of a particular apparatus would have on the electrical system.

The cost of this project is justified based on the need to replace equipment to restore and maintain service. The budget estimate is based on equipment inspections and historical replacement requirements, as well as on assessments of the current stock of spare equipment.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

RELIABILITY AND POWER QUALITY IMPROVEMENTS

Project Cost

$198,000

Nature of Project

This project involves the addition of equipment to substations that is necessary to improve power quality and reliability.

The following table lists the projects for 2003:

Project	Cost (000s)
Install recloser and associated equipment for additional feeder - Colliers substation	70
Install motor operator on switches - 39L (Holyrood to Bay Roberts)	100
Install high voltage switch equipment - Glenwood Substation	28
Total	**$198**

Customer Impact

This project will ensure customers are supplied at appropriate voltage levels, and will reduce power interruptions to customers.

Project Justification

The installation of appropriate equipment at Colliers Substation will facilitate the addition of a new feeder. The addition of motor operators to the switches on 39L transmission line at various substations will minimize the number of outages required to maintain transmission lines in the Conception Bay North area.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

SUBSTATION PROTECTION AND MONITORING IMPROVEMENTS

Project Cost

$425,000

Nature of Project

This project is necessary for the replacement and/or addition of protective relaying equipment and metering equipment required to maintain system protection and increase operating reliability.

The following table lists the projects for 2003:

Project	Cost (000s)
Replace protective relays on 302L and 305L at Greenhill, Laurentian and Salt Pond Substations	107
Add transformer tap-changer controls at Bay Roberts, Walbournes and Blaketown Substations	83
Add synchronizing clocks, transducers and voltage measuring devices at various substations	180
Projects <$50,000	55
Total	**$425**

There are 2 projects in the <$50,000 category. One involves the installation of reclosing relays at Blaketown Substation. The other involves the installation of an under-frequency relay at Gallant Street Substation.

Customer Impact

This project will help maintain the reliability and security of the electrical system.

**SUBSTATION PROTECTION AND
MONITORING IMPROVEMENTS (Cont'd)**

Project Justification

This project will make improvements to the protection and monitoring systems to allow for the safe and reliable operation of substations. It includes such items as the installation of reclosing and under-frequency relays, synchronizing clocks, digital recording voltmeters, replacement of over-current current relays and the addition of voltage measuring devices (potential transformers) to improve energy and demand metering at substations.

Protective relaying equipment is used to detect abnormal conditions on the electrical system, and to either initiate a disconnection of the affected portion of the system, where appropriate, or warn system operators of the existence of the condition.

The project is justified on the basis of maintaining the reliability and safe operation of the electrical system. Protection modifications will minimize outage times, while monitoring improvements will allow potential problems such as voltage variations to be identified before they lead to deteriorated service to customers.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

DISTRIBUTION SYSTEM
FEEDER REMOTE CONTROL

Project Cost

$1,200,000

Nature of Project

This is a continuation of a project initiated in 2002. It involves replacing a number of aging, limited function, electromechanical feeder relays and oil-filled reclosers with modern multi-function electronic relays and reclosers that can be remotely controlled from the System Control Center (SCC).

Customer Impact

The installation of electronic reclosers and relays that can be monitored and controlled from the SCC will result in faster detection of a failure on the feeder system and provide for more rapid restoration of service. Also, the SCC will be able to remotely de-energize feeders or sections of feeders in emergency situations thus increasing public safety.

Project Justification

The Company's existing 140 electromechanical feeder relays and 200 oil-filled reclosers are on average 25 years old and are nearing the end of their useful lives. All will require replacement over the next several years. In 2002 approximately 15 relays and 20 reclosers were replaced. In 2003 approximately 30 relays and 10 reclosers are budgeted for replacement. These devices are integral to maintaining the safety and reliability of the electrical system. The safety function of a recloser or relay stems from its ability to interrupt power to a section of a distribution feeder should the line become unsafe due to a catastrophic event, such as a downed power line or broken pole. A recloser will aid reliability in that it can operate to automatically restore service in the event of a temporary fault on the electrical system (e.g. lines slapping together), therefore reducing outage duration.

DISTRIBUTION SYSTEM
FEEDER REMOTE CONTROL (Cont'd)

The project is justified on the basis of improvements in safety, operating efficiencies, power system reliability and a reduction in risk to the environment. The new reclosers will: reduce operating costs by eliminating the field visits required to manually operate the recloser for maintenance on distribution lines; reduce power outage restoration times, by providing the SCC, and repair crews, with immediate notification of the location of power interruptions; reduce environmental risk by eliminating oil-filled reclosers; and, increase public safety by giving the SCC the ability to remotely de-energize feeders or sections of feeders in emergency situations.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labor will be obtained through competitive tendering.

Future Commitments

None.

VIRGINIA WATERS
ADD 66/12.5 kV TRANSFORMER

Project Cost

$1,150,000

Nature of Project

This project involves the addition of a third 66/12.5 kV 25 MVA transformer at the Virginia Waters Substation. It includes the purchase and installation of the transformer as well as the modifications to the Virginia Waters Substation necessary to install the transformer.

Customer Impact

This project will provide the additional capacity necessary to serve the growing customer base in the Virginia Waters, Torbay Rd., Stavanger Drive and Logy Bay areas. A third transformer will also improve service reliability for customers supplied from the Virginia Waters Substation. Should one transformer fail, the other two transformers are capable of carrying the load, except during peak load conditions. This would reduce power interruptions experienced by customers until such time as the other transformer is repaired or a portable unit is installed.

The additional transformer would also be available for emergency deployment at another location in the event of a failure of a substation transformer. In the event of a failure necessitating either the replacement of the failed transformer or a lengthy repair period, the deployment of a standard transformer provides for a more reliable longer-term replacement than a portable transformer.

Project Justification

The area served by the Virginia Waters Substation is one of the highest customer growth areas in the Company's service territory. The two existing transformers are each rated at 25 MVA. The peak load on one of the two transformers is forecast to exceed its nameplate capacity in 2003, and the other transformer is approaching nameplate capacity. The third transformer will accommodate this growth. It will also provide sufficient transformer capacity to carry the substation load in the event of the failure of one of the substation transformers, except during peak load conditions.

VIRGINIA WATERS
ADD 66/12.5 kV TRANSFORMER (Cont'd)

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

CHAMBERLAINS
ADD 66/25 kV TRANSFORMER

Project Cost

$1,250,000

Nature of Project

This project involves the addition of a second 66/25kV 25 MVA transformer at the Chamberlains Substation. It includes the purchase and installation of the transformer as well as the modifications to the Chamberlains Substation necessary to accommodate installation of the transformer.

Customer Impact

This project will provide the additional capacity necessary to serve the growing customer base in the Chamberlains, Manuels and Topsail areas of Conception Bay South. The second transformer will also improve service reliability for customers supplied from the substation. Should one transformer fail, the other transformer are capable of carrying the load, except during peak load conditions. This would reduce power interruptions experienced by customers until such time as the other transformer is repaired or a portable unit is installed.

The additional transformer would also be available for emergency deployment at another location in the event of a failure of a substation transformer. In the event of a failure necessitating either the replacement of the failed transformer or a lengthy repair period, the deployment of a standard transformer provides for a more reliable longer-term replacement than a portable transformer.

Project Justification

The area served by the Chamberlains Substation is one of the highest customer growth areas in the Company's service territory. The existing transformer is rated at 25MVA. The peak load at the substation exceeds the nameplate capacity of the substation transformer. The second transformer is necessary to accommodate this growth. It will also provide sufficient transformer capacity to carry the substation load in the event of the failure of one of the substation transformers, except during peak load conditions.

CHAMBERLAINS
ADD 66/25 kV TRANSFORMER (Cont'd)

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

TRANSMISSION

REBUILD TRANSMISSION LINES

Project Cost

$4,129,000

Nature of Project

This project is necessary to replace poles, crossarms, conductors, insulators and miscellaneous hardware due to deficiencies identified during annual inspections.

This project category includes numerous projects aimed at rebuilding and replacing deteriorated transmission line structures and conductors. As well, in recent years the extensive use of our transmission line right of ways by the general public has increased the need to mark guy wires with appropriate guards to reduce the likelihood of accidents. The project cost is based on a combination of historical costs and individual project estimates.

Many of the Company's older transmission lines are experiencing pole, crossarm, and brace deterioration to the point where replacement is required to maintain the strength and integrity of the line. Thirty per cent of the Company's 110 transmission lines are in excess of forty years of age. As well, inspections and testing activities have revealed significant increases in the quantities of corroded conductors in some locations. This is causing upward pressure on transmission line rebuild requirements.

The following table lists the projects for 2003:

Project	Cost (000s)
Goulds to Mobile - rebuild 24L	650
Grand Beach to Salt Pond - replace conductor 301L	2,000
Clarenville to Catalina - replace deteriorated bolts, and insulators 123L	74
Clarenville to Gambo - rebuild 124L	500
Bay View to Massey Drive - rebuild 357L	55
Install guy guards	100
Projects < $50,000	750
Total	**$4,129**

Transmission lines 24L and 17L run parallel to each other between Goulds and Mobile Substations. These lines were built in the early 1950s and are significantly deteriorated. The Company intends to decommission 17L, which has suffered greater deterioration due to age, and focus its resources on 24L. In total, 11 kilometres of the line will be rebuilt in 2003.

REBUILD TRANSMISSION LINES (Cont'd)

Transmission line 301L forms part of the Company's looped transmission system on the Burin Peninsula. In total, approximately 38 kilometres of the line will be rebuilt in 2003. These portions of the line, which were constructed in 1959 and 1966, have a number of deteriorated poles. Due to salt contamination along the coast, and exposure to high winds and severe ice accumulation, large sections of the line contain damaged and severely corroded conductor. The portions to be rebuilt will be constructed to a higher design standard to accommodate the harsh environment and, where possible, will be relocated closer to the highway.

Transmission line 124L is a portion of a longer transmission line built in 1964. Portions of the line have been rebuilt in recent years to establish adequate vertical ground clearance. In a number of locations, ground clearance is inadequate and will be corrected. In addition, an evaluation of the line design will be conducted to determine whether it is of a standard that is adequate for expected ice and wind loading. Where inadequacies exist, the line will be rebuilt.

There are approximately 50 projects included in the <$50,000 category. These projects chiefly involve individual pole, crossarm or insulator replacements that have been identified through annual inspections

Customer Impact

This project maintains the structural integrity of transmission lines and addresses upgrade requirements identified during inspections. This is critical for the safe operation and reliable performance of the transmission system.

Project Justification

Replacement of this deteriorated transmission line equipment is necessary to prevent service interruptions.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

DISTRIBUTION

EXTENSIONS

Project Cost

$4,322,000

Nature of Project

This project is necessary to construct both primary and secondary lines to connect new customers to the electrical distribution system. The project also includes upgrades to the capacity of existing lines to accommodate customers who increase their electrical load. The project cost estimate includes all labour, materials, and other costs to install poles, wires and related hardware.

The following table provides a breakdown of cost by region and operating area.

Region/Area	2003 Budget (000s)
St. John's	1,900
Avalon	840
Burin	130
Eastern Region	**$2,870**
Bonavista	296
Gander	315
Grand Falls	270
Corner Brook	243
Stephenville	328
Western Region	**$1,452**
Total	**$4,322**

The project cost for the connection of new customers is calculated on the basis of historical data for specific operating areas. Historical annual expenditures are adjusted for inflation and divided by the number of new customers in each year to derive an average extension cost per customer. Unusually high and low data is excluded from the average. This historical average is then modified by the GDP Deflator for Canada before being multiplied by the forecast number of new customers to determine the budget estimate. The forecast number of new customers is derived from economic projections provided by the Conference Board of Canada.

The cost of capacity upgrades is based on individual project estimates.

EXTENSIONS (Cont'd)

Customer Impact

This project enables the Company to construct power lines to extend service in response to customer requests. It also allows the Company to upgrade lines in response to customers requesting additional supply capacity.

Project Justification

This project is justified on the basis of customer requirements.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

METERS

Project Cost

$674,000

Nature of Project

This project is necessary to accommodate customer growth and to replace deteriorated electrical equipment. The project cost includes the cost of meters for new customers and replacement meters for existing customers. The quantity of meters for new customers is based on the Company's forecast of customer growth. The quantity of meters for replacement purposes is determined using historical data for damaged meters and sampling results from previous years. Sampling of Company meters is performed by Newfoundland & Labrador Hydro in accordance with regulations under the *Electricity and Gas Inspection Act*.

Customer Impact

This project provides for metering installations necessary to meet customers' electrical service requirements. Through a rigorous meter testing and replacement program, customers are provided with accurate metering of their electricity consumption.

Project Justification

This project is justified on the basis of customer requirements and Industry Canada regulations.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

SERVICES

Project Cost

$1,819,000

Nature of Project

This project is necessary to provide for the installation of service wires to connect new customers to the electrical distribution system. Service wires are low voltage wires that connect the customer's electrical service equipment to the utility's transformers. Also included in this category is the replacement of existing service wires due to deterioration, failure or damage, as well as the installation of larger wires to accommodate customers' additional loads.

Expenditures on this project are driven by both customer growth and the Company's experience with regard to service wires that must be replaced to maintain reliable service and power quality. The projected expenditures for Services for 2003 are $1,200,000 for new services and $619,000 for replacement services.

The following table provides a breakdown of cost by region and operating area.

Region/Area	New (000s)	Replacement (000s)	Total (000s)
St. John's	525	250	775
Avalon	212	157	369
Burin	46	30	76
Eastern Region	**$783**	**$437**	**$1,220**
Bonavista	86	25	111
Gander	85	32	117
Grand Falls	79	19	98
Corner Brook	72	75	147
Stephenville	95	31	126
Western Region	**$417**	**$182**	**$599**
Total	**$1,200**	**$619**	**$1,819**

With the exception of some small individually estimated projects, the project cost is calculated on the basis of historical data. For new services, historical annual expenditures are adjusted for inflation and divided by the number of new customers in each year to derive an average new service cost per customer. Unusually high and low data is excluded from the average.

SERVICES (Cont'd)

This historical average is then modified by the GDP Deflator for Canada before being multiplied by the forecast number of new customers to determine the budget estimate. A similar process is followed for replacement services using historical actual expenditures to replace damaged or deteriorated service wires. Street light customers are excluded for the purpose of this calculation.

Customer Impact

These projects provide and maintain electric service to new and existing customers. Service wire replacements help maintain a reliable high quality power supply to customers.

Project Justification

These projects are justified on the basis of customer requirements.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

STREET LIGHTING

Project Cost

$952,000

Nature of Project

This project is necessary to provide for the installation of new street lighting fixtures, replacement of existing street lighting fixtures, and provision of associated overhead and underground wiring. A street lighting fixture includes the light head complete with bulb, photocell and starter as well as the pole mounting bracket and other hardware. The project is driven by customer requests and historical levels of street lighting fixture failures requiring replacement.

The projected expenditures for Street Lighting for 2003 are $587,000 for new units and $365,000 for replacement units.

The following table provides a breakdown of cost by region and operating area.

Region/Area	New (000s)	Replacement (000s)	Total (000s)
St. John's	300	133	433
Avalon	90	65	155
Burin	24	33	57
Eastern Region	**$414**	**$231**	**$645**
Bonavista	31	25	56
Gander	31	26	57
Grand Falls	31	19	50
Corner Brook	30	33	63
Stephenville	50	31	81
Western Region	**$173**	**$134**	**$307**
Total	**$587**	**$365**	**$952**

The project cost is calculated on the basis of historical data. For new units, historical annual expenditures are adjusted for inflation and divided by the number of new customers in each year to derive an average cost per new customer. This historical average is then modified by the GDP Deflator for Canada before being multiplied by the forecast number of new customers to determine the budget estimate.

STREET LIGHTING (Cont'd)

For replacement units, historical annual expenditures for replacement of damaged, deteriorated or failed units are adjusted for inflation and divided by the total number of customers served in each year to derive an average replacement unit cost per customer. This historical average is then modified by the GDP Deflator for Canada before being multiplied by the forecast of the total number of customers served to determine the budget estimate.

Customer Impact

These projects provide and maintain street lighting service to new and existing customers.

Project Justification

These projects are justified on the basis of customer requirements.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

TRANSFORMERS

Project Cost

$4,975,000

Nature of Project

This project is necessary to accommodate customer growth and to replace deteriorated electrical equipment. The project includes the cost of purchasing transformers for customer growth and the replacement of transformers that have deteriorated or failed. The project cost is based on historical data and field surveys.

Transformer requirements are determined as follows:

a) The number of transformers required for new customers is based on estimates for each of the Company's operating areas. The estimate is created by regional engineering personnel in light of the forecast number of new residential customers for each area and their judgment as to additional transformers required for new general service customers based on a combination of historical experience and specific knowledge.

b) The number of replacement transformers is based on field surveys of rusty or deteriorated transformers.

c) The number of transformers required for conversions and upgrades, and an allowance for contingency (burnouts and storm damage, etc.) are estimated on the basis of planned projects and historical data.

The Company expects to purchase approximately 3,000 pole mounted transformers in 2003. There is also an allotment of $500,000 for approximately 50 padmount transformers. As of year end 2001, the Company had a total of approximately 56,000 pole mounted transformers and approximately 600 padmount transformers in service.

Customer Impact

Transformers provide service to new customers, increase supply capacity for existing customers who increase their load, and replace transformers that deteriorate or fail.

TRANSFORMERS (Cont'd)

Project Justification

This project is required to provide and maintain service to customers.

The corrosion of transformer tanks leads to both service reliability and environmental problems. In 2001, the Company started using longer life stainless steel transformer tanks, which were expected to reduce the frequency of such problems. This initiative has placed upward pressure on overall transformer expenditures as the stainless steel tanks are approximately 18% more expensive than the electrostatic tanks purchased previously. The Company expects this trend to continue for the next few years.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

RECONSTRUCTION

Project Cost

$2,745,000

Nature of Project

This project is necessary to provide for the replacement of deteriorated or storm damaged distribution structures and electrical equipment. This project is primarily comprised of a number of smaller projects that are identified during line inspections or recognized following operational problems. By their nature these are high priority projects that normally cannot be deferred to the next budget year. This project differs from the Rebuild Distribution Lines project described at page 46 of 82, which involves rebuilding entire sections of trunk lines that are identified and planned in advance of budget preparation.

The project also includes an allowance of $400,000 to provide for the reconstruction of distribution lines necessary to render them suitable for joint use with Aliant Telecom Inc.

The project cost is estimated on the basis of average historical expenditures related to unplanned repairs to distribution feeders, and on the estimated cost of anticipated requirements of Aliant Telecom Inc.

The following table provides a breakdown of cost by region and operating area:

Region/Area	2003 Budget (000s)
St John's	522
Avalon	460
Burin	401
Eastern Region	**$1,383**
Bonavista	304
Gander	271
Grand Falls	236
Corner Brook	281
Stephenville	270
Western Region	**$1,362**
Total	**$2,745**

RECONSTRUCTION (Cont'd)

Customer Impact

These projects maintain the distribution system and improve reliability to customers. The reconstruction of existing distribution lines also provides for safer operation of the electrical system to protect the public and employees.

Project Justification

These projects are justified on the basis of reliability, on the need to replace deteriorated and damaged electrical equipment, and on the need to reconstruct lines to render them suitable for joint use. The incremental cost of reconstruction to render distribution lines suitable for joint use will be recovered from Aliant Telecom Inc. in accordance with the terms of the Joint Use Facilities Partnership Agreement between the Company and Aliant Telecom Inc.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

ALIANT POLE PURCHASE

Project Cost

$4,044,000

Nature of Project

This project is necessary to cover the 2003 installment associated with the Support Structures Purchase Agreement entered into with Aliant Telecom Inc.

Customer Impact

This project will contribute to the Company's ongoing efforts to achieve operating efficiencies.

Project Justification

This project is necessary to comply with the terms of the Support Structures Purchase Agreement entered into by Newfoundland Power Inc. and Aliant Telecom Inc. covering the purchase of all joint-use poles within Newfoundland Power's service territory over a five year period.

Future Commitments

As per the terms of the Support Structures Purchase Agreement, the following amounts are required to complete the purchase of all joint-use poles within Newfoundland Power's service territory from Aliant Telecom Inc.

2004	$4,044,000
2005	$4,044,000

TRUNK FEEDERS
REBUILD DISTRIBUTION LINES

Project Cost

$3,504,000

Nature of Project

This project is necessary to provide for the replacement of deteriorated distribution structures and electrical equipment for entire sections of trunk lines that have been previously identified through ongoing line inspections. The total budget estimate for this category is based on individual project estimates.

This project is distinguished from the Reconstruction project described at page 43 of 82 in that these projects are larger, and are previously defined and estimated in advance of the budget process. Plans for these projects are developed from line inspection reports that assess the age, condition, maintenance costs, and overall integrity of the distribution line to provide for public and employee safety. Unlike the Distribution Reliability Initiative projects described at page 50 of 82, the selection of lines for rebuilding focuses more on the actual physical condition of the lines than on their historical reliability performance.

Distribution rebuild projects can involve either the complete rebuilding of deteriorated distribution lines or the selective replacement of various line components. These typically include pole replacement, crossarm replacement, conductor replacement including replacement of underground distribution equipment, and insulator replacement.

The following table lists the projects for 2003.

Project	Cost (000s)
Extend GLV-02 to Charlottetown	247
Rebuild feeder (KBR-08) - St. John's	190
Rebuild feeder (KBR-11) - St. John's	187
Rebuild feeder (SLA-09) - St. John's	225
Rebuild feeder (SPR-03) - Springdale	390
Rebuild sections of feeders in Port-Aux-Basques	200
Insulator replacement - various feeders	568
Relocate feeder (SPO-02) - Lewins Cv to Epworth Jct	120
Rebuild feeder (NWB-01) - Goobies to North Hr.	407
Rebuild feeder (WES-02) - Lumsden to Deadmans Bay	50
Relocate feeder (WAL-05) - Georgetown Trailor Park	50
Relocate feeder (HCT-01) Hearts Content Barrens	70
Relocate feeder (COL-01) - Colliers	80
Upgrade distribution small projects <$50,000	720
Total	**$3,504**

TRUNK FEEDERS
REBUILD DISTRIBUTION LINES (Cont'd)

Newfoundland Power's Springdale feeder (SPR-03) supplies Newfoundland & Labrador Hydro's ("Hydro") Little Bay system. The feeder is deteriorated and requires substantial upgrading or replacement. A joint planning study by Newfoundland Power and Hydro determined that the least cost solution is to rebuild the feeder along the highway. As part of a joint initiative, Newfoundland Power will rebuild the feeder to Hydro's St. Patrick's Substation, and Hydro will convert its 4.16 kV system to 25 kV and take supply from Newfoundland Power at St. Patrick's Substation. The Little Bay Substation will then be retired.

There are approximately 30 items in the < $50,000 category. The majority of these involve replacement of deteriorated conductors on sections of various feeders. The remainder are mostly associated with the relocation of lines to road right of ways and the replacement of deteriorated cross arms.

Customer Impact

This project is focused on rebuilding and maintaining distribution lines so as to replace lines and equipment before failures due to deterioration create power interruptions, safety hazards and increased operating costs associated with emergency repairs.

Project Justification

The Company has over 8,000 kilometres of distribution lines in service and has an obligation to maintain this plant in good condition to safeguard the public and its employees. The replacement of deteriorated distribution structures and equipment is critical in preventing failures and maintaining reliable service to customers.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

TRUNK FEEDERS
RELOCATE/REPLACE DISTRIBUTION LINES FOR THIRD PARTIES

Project Cost

$275,000

Nature of Project

This project is necessary to accommodate third party requests for relocation of distribution lines. The relocation or replacement of distribution lines result from (1) work initiated by municipal, provincial and federal governments, (2) work initiated by other utilities such as Aliant Telecom and Rogers Cable, (3) requests from customers or (4) vehicle accident damage.

The cost estimate is based on historical expenditures and some individual project estimates. Generally these expenditures are associated with a number of small projects that are not specifically identified at the time the budget is prepared.

Work initiated by government is estimated to be $105,000 in 2003 and is primarily associated with road widening and road realignment. Aliant Telecom and Rogers Cable work, estimated at $40,000 in 2003, involves relocation or replacement of lines for additional conductor installations. Customer requests typically involve relocation of poles, anchors and guy wires from private property. The cost of such work is estimated to be $80,000 in 2003. The estimated cost for vehicle accident damage in 2003 is $50,000.

Customer Impact

There is no direct customer impact, except in the case of some vehicle accidents where electrical service has to be restored.

Project Justification

The Company must respond to requests for relocation and replacement of distribution facilities under the provisions of agreements in place with the requesting parties.

Estimated contributions from customers and requesting parties associated with this project have been included in the $1.5 million contribution in aid of construction amount referred to in the Application.

TRUNK FEEDERS
RELOCATE/REPLACE DISTRIBUTION LINES FOR THIRD PARTIES (Cont'd)

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

TRUNK FEEDERS
DISTRIBUTION RELIABILITY INITIATIVE

Project Cost

$1,078,000

Nature of Project

This project is necessary to improve service reliability on distribution lines with below-average reliability. The project involves the upgrading of trunk feeder structures and equipment to reduce both the frequency and duration of power interruptions to the customers served by the distribution line. The nature of the upgrading work follows from a detailed assessment of past problems, knowledge of local environmental conditions (such as salt contamination and wind and ice loading), and engineering knowledge to apply location specific design and construction standards. Project plans are subsequently developed from an engineering analysis and options are evaluated that improve reliability performance.

These are special projects selected on the basis of the reliability performance of the distribution lines. Prioritizing these projects also requires consideration of the costs, the number of customers affected, and judgment as to the reliability improvement that can be expected as a result of the line upgrade project.

Customer Impact

The customers served by the feeders selected for upgrading will experience reductions in both the number of power interruptions and the duration of outages that may occur.

Project Justification

These projects are justified on the basis of reliability improvement. Customers currently supplied by these feeders experience power interruptions significantly more often than the Company average. Individual feeder projects have been prioritized based on their historic SAIFI and SAIDI statistics.

Expenditures on the distribution reliability initiative have had a positive impact on the reliability performance of the feeders that have been upgraded.

TRUNK FEEDERS
DISTRIBUTION RELIABILITY INITIATIVE (Cont'd)

The following table identifies the feeder projects selected for upgrading in 2003 and indicates the estimated project cost, the number of customers affected, and the average yearly interruption statistics for the five-year period ending December 31, 2001. The SAIFI and SAIDI statistics exclude planned power interruptions and interruptions due to loss of supply from Hydro.

In the case of the Milton feeder, much of the feeder has been upgraded in recent years. Consequently, the reliability statistics for the entire feeder do not truly reflect the experience of customers on Random Island who are served by the 10.5-kilometre portion of the line that is to be upgraded in 2003. This portion of line is 40 years old and has not been upgraded in recent years. There were 9 unscheduled outages on this portion of the line in a 12-month period commencing in April 2001. The outages were primarily caused by the failure of insulators and other equipment on the line.

Feeder	Cost (000s)	Number of Customers	SAIFI[1] Interruptions Per Year	SAIDI[2] Hours Per Year
Glovertown (GLV-02)	350	1,195	3.7	8.2
Long Lake (LGL-02)	200	688	3.7	5.5
Milton (MIL-02)	528	1,293	2.9	2.2
Company Average			1.8	2.9

Notes:

[1] System Average Interruption Frequency Index (SAIFI) is the average number of interruptions per customer. It is calculated by dividing the number of customers that have experienced an outage by the total number of customers in an area.

[2] System Average Interruption Duration Index (SAIDI) is the average interruption duration per customer. It is calculated by dividing the number of customer-outage-hours (e.g., a two hour outage affecting 50 customers equals 100 customer-outage-hours) by the total number of customers in an area.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

TRUNK FEEDERS
IMPROVE DISTRIBUTION SYSTEM PROTECTION/OPERATION

Project Cost

$457,000

Nature of Project

Distribution system protection involves the installation of equipment and devices that provide for improved operation of the electrical system when problems such as electrical faults, short circuits or lightning strikes occur. This project involves the installation of lightning arresters on transformers and other electrical equipment, the installation of fuses, and the installation of switches to improve sectionalizing of distribution lines.

The following table lists the projects for 2003:

Project	Cost (000s)
Install lightning arrestors	73
Install current limiting fuses	169
Install cutouts and switches for sectionalizing and isolation purposes	215
Total	**$457**

Customer Impact

This project will improve service reliability, reduce outage time, and reduce the number of customers affected by certain distribution problems.

Project Justification

This project will improve distribution system protection so as to increase system reliability and reduce damage costs associated with lightning strikes.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

**TRUNK FEEDERS
SWITCH REPLACEMENT AND
UPGRADE UNDERGROUND DISTRIBUTION
WATER STREET, ST. JOHN'S**

Project Cost

$762,000

Nature of Project

This project is necessary to remove 3 high voltage oil-filled switches and 3 banks of platform-mounted transformers that form part of the Water Street underground distribution system. The project will require the installation of pad-mount switches and pad-mount transformers, as well as the establishment of loop feeds for sections of the underground distribution system at three locations along Water Street, St. John's.

Customer Impact

The upgrading of the Water Street underground system will improve the reliability of service to customers in the Water Street area.

Project Justification

The existing high voltage oil-filled switches are 30 years old and the manufacturer states that they cannot guarantee that the switches have load break capability. The manufacturer no longer supplies replacement parts for these switches. As well, there are safety issues associated with certain operations of the existing switches. For example, the switches rely on manual operation, and internal arcing and deterioration of contacts may occur. New switches have technology that eliminates these safety concerns.

Also, in conjunction with the switch replacements, there are other areas along the Water Street distribution system that require attention. For example, there are several locations where transformers are located on platforms that are 30 years old and are located next to buildings, resulting in clearance problems for workers engaged in maintaining the exterior of these buildings.

TRUNK FEEDERS
SWITCH REPLACEMENT AND
UPGRADE UNDERGROUND DISTRIBUTION
WATER STREET (Cont'd)

There were originally 12 underground high voltage switches that needed to be addressed. By the end of 2002, 7 of these switches will either have been replaced or eliminated. All of the remaining switches are being considered for replacement or elimination by 2004. The 2002 underground switch program involves some new technology, and the choice of replacement or elimination of the remaining switches will depend on the results achieved.

Future Commitments
None.

INTEREST DURING CONSTRUCTION

Project Cost

$100,000

Nature of Project

This is an estimate of the interest during construction that will be charged on distribution work orders with an estimated expenditure of less than $50,000 and a construction period in excess of three months. This calculation is based on an estimated monthly average of total distribution work in progress of $1.0 million. The interest rate which is applied each month is dependent on the source of funds to finance the capital expenditure and is calculated in accordance with Order No. P.U. 37 (1981).

Customer Impact

No direct customer impact.

Project Justification

These costs are justified on the same basis as the distribution work orders to which they are charged.

Future Commitments

None.

GENERAL PROPERTY

TOOLS AND EQUIPMENT

Project Cost

$770,000

Nature of Project

This project is necessary for the addition or replacement of tools and equipment utilized by line and support staff in the day-to-day operations of the Company, as well as the replacement or addition of office furniture and equipment.

The following table lists the projects for 2003:

Category	Cost (000s)
Line tools and equipment[1]	550
Office furniture and equipment[2]	220
Total	**$770**

Notes:

[1] Line Tools and Equipment includes various tools and equipment used by line staff, electrical maintenance staff, and engineering and field technical staff. The tools and equipment include fall arrest devices, hydraulic tools, instruments, test gear, tension stringers for conductor installation and inspection equipment.

[2] Office Furniture and Equipment includes the replacement of broken or deteriorated furniture and office equipment, as well as the purchase of additional filing and storage equipment.

The project cost is based on historical costs for the replacement of tools and equipment that become broken or worn out. Additional or replacement tools are purchased to increase employee productivity, quality of work and overall operational efficiency.

Customer Impact

The addition or replacement of these tools and equipment help employees work efficiently and produce higher quality work.

TOOLS AND EQUIPMENT (Cont'd)

Project Justification

This equipment enables staff to perform work in a safe, effective and efficient manner.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

ADDITIONS TO REAL PROPERTY

Project Cost

$140,000

Nature of Project

The project is necessary to maintain buildings and facilities and to operate them in an efficient manner. It involves the addition to, or renovation of, Company property.

The following table lists the projects for 2003:

Category	Cost (000s)
Additions[1]	75
Renovations[2]	65
Total	**$140**

Notes:

[1] Additions include a material storage area for the electrical maintenance facility on Topsail Road, the installation of a transformer ramp at the Twillingate facility and improvements to security at Company facilities.

[2] Renovations include replacement of the roof at the Maple Valley building in Corner Brook, as well as other service building improvements.

The project cost is based on a combination of historical costs and individual project estimates.

Customer Impact

Most of these projects have no direct customer impact. However, some are renovations to buildings and property frequented by customers.

Project Justification

Property renovations are required to ensure safe and efficient working areas for employees.

ADDITIONS TO REAL PROPERTY (Cont'd)

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

ALLOWANCE FOR UNFORESEEN ITEMS

Project Cost

$750,000

Nature of Project

This item is necessary to cover any unforeseen capital expenditures which have not been budgeted elsewhere. Examples of such expenditures are the replacement of facilities and equipment due to major storm damages or equipment failure.

Customer Impact

This project provides funds for timely service restoration.

Project Justification

Projects for which these funds are intended are justified on the basis of reliability, or on the need to immediately replace deteriorated or damaged equipment.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitment

None.

TRANSPORTATION

PURCHASE OF VEHICLES AND AERIAL DEVICES

Project Cost

$2,141,000

Nature of Project

This project involves the necessary replacement of passenger vehicles and aerial devices (line trucks). The existing units to be replaced have reached the end of their useful lives and are beyond economical repair.

The following table lists the projects for 2003:

Category	Cost (000s)	No. of Units
Passenger/off-road vehicles [1]	866	48
Heavy fleet vehicles [2]	1,275	7
Total	**$2,141**	**55**

Notes:

[1] The Passenger/Off-Road Vehicles category includes the purchase of cars, light duty trucks, snowmobiles, ATVs and trailers.
[2] The Heavy Fleet Vehicles category includes the purchase of replacement line trucks.

Customer Impact

This project will help maintain an acceptable level of customer service and employee safety.

Project Justification

All units to be replaced have been evaluated for factors such as overall condition, maintenance history and immediate repair requirements. Based on this evaluation, it has been determined that each unit has reached the end of its useful life and is beyond economical repair. For passenger vehicles the average life span is five years or 150,000 kilometers. For heavy fleet vehicles the average life span is 10 years or 250,000 kilometers.

New vehicles are acquired through competitive tendering and lease/buy analyses are prepared to ensure the lowest possible cost consistent with reliable service.

Future Commitments

None.

TELECOMMUNICATIONS

REPLACE/UPGRADE COMMUNICATIONS EQUIPMENT

Project Cost

$242,000

Nature of Project

This project is necessary to upgrade or replace deteriorated communications equipment.

The following table lists the projects for 2003:

Project	Cost (000s)
Replace UHF System (Rattling Brook to Sandy Brook Hydro Plants)	155
Projects < $50,000	87
Total	**$242**

There are three items in the < $50,000 category. These include, upgrading radio towers, upgrading the local centrex system and replacement of VHF radios.

The project cost is based on a combination of historical costs and individual project estimates.

Customer Impact

Effective communications are critical to ensuring the safe and reliable operation of the power system.

Project Justification

This project is required to ensure the integrity of the Company's communication system. The UHF communications system between Rattling Brook and Sandy Brook was installed in 1985. It is obsolete and is not providing reliable service. The UHF system is a link in the Company's voice communications system in Central Newfoundland, and also enables remote control and monitoring of the Sandy Brook Hydro Plant.

REPLACE/UPGRADE COMMUNICATIONS EQUIPMENT (Cont'd)

Over a 12-month period to July 2002, the system functioned at a level below that sufficient to provide remote control capability for the Sandy Brook Plant approximately 9 per cent of the time. Reliable remote control of this unattended hydro plant is essential to ensure proper control of dam gates and the safety of the main forebay dam during periods of high inflow. Remote monitoring enables the Company to anticipate operational problems with the unit that could result in an oil spill or in damage to the generating unit itself.

The smaller projects involve the replacement or upgrade of deteriorated equipment.

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering.

Future Commitments

None.

SUBSTATION TELEPHONE CIRCUIT PROTECTION

Project Cost

$141,000

Nature of Project

This project involves:

a) Field visits to measure soil resistivity and calculation of ground potential rise at five Newfoundland Power substations (Pierre's Brook, Bay Roberts, Carbonear, Riverhead and Clarenville).

b) Upgrades to teleline isolation installations at five Newfoundland Power substations (Bay Roberts, Carbonear, Blaketown, Bishop's Falls and Mobile). This work involves extending and increasing the diameter of the conduit containing Aliant Telecom's incoming cable.

c) An engineering study into the actual versus calculated ground potential rise at substations in the Newfoundland environment.

Customer Impact

This work will assist in ensuring all personnel using or working on the communication equipment at each of these substations, and at the telephone exchange serving the substation, will be protected from electrical shock caused by excessive ground potential rise. It will also eliminate the possibility that ground potential rise may damage communications equipment of third parties sharing cable plant with Newfoundland Power equipment.

Project Justification

This project is justified on the basis of safety and reliability. Teleline isolation equipment will ensure that Aliant Telecom equipment remote from the substation will also be protected from any ground potential rise. The use of teleline isolation also ensures that the Company's SCADA communications circuits remain available to control and monitor the electrical system. This communication is necessary to ensure the safe and reliable management of power system devices.

SUBSTATION TELEPHONE CIRCUIT PROTECTION (Cont'd)

The Company will ensure this project is completed at the lowest possible cost consistent with reliable service. All material and contract labour will be obtained through competitive tendering, except in the case of teleline isolation equipment where Aliant Telecom Inc. is the sole supplier.

Future Commitments

None.

INFORMATION SYSTEMS

APPLICATION ENHANCEMENTS

Project Cost

$766,000

Nature of Project

The Company has many software applications (including custom developed applications like the Customer Service System ("CSS") and software packages such as Microsoft Great Plains eEnterprise). This project is necessary to enhance these applications to support changing business requirements and take advantage of new developments and product improvements.

The project involves:

a) *Customer Systems ($251,000)*
This project includes enhancing the integration between CSS and the Handheld Meter Reading System to improve service order processing and meter reader efficiency, streamline processes (i.e. meter reading estimating and closing customer accounts), improve customer service and Call Centre efficiency, as well as the evaluation of alternatives for the replacement of the Company's outdated cash processing system.

b) *Business Support Systems ($84,000)*
This project includes the development of new reporting capabilities required to analyse purchasing discount opportunities with frequently used suppliers, improvements to credit card workflow processes, improvements to the accounts receivable collections processes and improved access to employee information to enhance employee performance management.

c) *Safety Management System Enhancements ($99,000)*
This project involves extending the functionality of the current Safety Management System to include the tracking of contractor safety performance, safety-auditing protocols, tracking of occupational health concerns, and the handling and control of workplace hazardous materials to meet the requirements of occupational health and safety legislation.

APPLICATION ENHANCEMENTS (Cont'd)

d) *Internet/Intranet ($116,000)*
This project involves the identification, design, and implementation of enhancements to the Company's external Internet web site and internal Intranet web site to improve on-line services to our customers and improve employee access to Company data (including policies, procedures and data stored in business applications). This will eliminate redundant processes and reduce the manual effort associated with maintaining Company information.

e) *Various Minor Enhancements ($216,000)*
This project involves enhancements to the Company's computer applications in response to unforeseen requirements, such as legislative and compliance changes; vendor driven changes, and employee driven enhancements designed to improve customer service or staff productivity. Examples of previous changes have included Canada Post-initiated changes related to customer addresses, government-driven changes to income tax calculations in the payroll application and the development of workflow applications to enhance current environmental and operational processes.

Customer Impact

This project will contribute to the Company's ongoing efforts to achieve operating efficiencies and improve customer service.

Project Justification

This project is justified on the basis of improvements in customer service and increased operational efficiencies.

All materials and services for this project will be purchased after examining the competitive bids of prospective suppliers. Where alternative suppliers do not exist, all materials and services will be negotiated with a sole-source supplier to ensure least cost.

Future Commitment

None.

APPLICATION ENVIRONMENT

Project Cost

$755,000

Nature of Project

This project is necessary in order to provide a stable and effective technology environment for the delivery and operation of the Company's business applications. This includes upgrades to current software tools, processes, and applications as well as the acquisition of new software licenses.

The project involves:

a) *Microsoft Enterprise Agreement ($250,000)*
The Microsoft Enterprise Agreement provides the Company with the right to use and upgrade Microsoft desktop products including Word, Excel, Access, and PowerPoint and back office products such as SQL Server.

b) *Application Software Upgrades ($155,000)*
Application software upgrades are necessary to keep versions of software products, such as Oracle database management software, up-to-date in order to ensure stable operation of the business applications that rely on them and to maintain vendor support. This project includes the internal labour to test the applications affected by such product upgrades.

c) *Environment Management ($145,000)*
Environment Management ensures that application development and implementation tools are updated and maintained to reflect changing technology and business requirements.

d) *Microsoft Great Plains eEnterprise Upgrade ($205,000)*
The Finance, Human Resources, Materials Management, Purchasing, and Payroll applications use the Microsoft Great Plains eEnterprise software. This project includes internal and external labour to implement and test a major upgrade to the eEnterprise software (to version 7.0 from version 6.0), and several vendor supplied software patches.

APPLICATION ENVIRONMENT (Cont'd)

Customer Impact

This project will contribute to the Company's ongoing efforts to achieve operating efficiencies and improve customer service.

Project Justification

This project is necessary to assess and take advantage of newly developed technology capabilities that contribute to improvements in the Company's information technology systems and ensure that corporate applications continue to operate in a stable and reliable manner. The proper maintenance of the application environment also provides the flexibility to accommodate new application and business requirements.

All materials and services for this project will be purchased after examining the competitive bids of prospective suppliers. Where alternative suppliers do not exist, all materials and services will be negotiated with a sole-source supplier to ensure least cost.

Future Commitment

None.

CUSTOMER SERVICE SYSTEM STUDY

Project Cost

$170,000

Nature of Project

This project consists of a study that will assess the risk of continuing to use the existing Customer Service System (CSS) system and will present options for maintaining or replacing the Company's CSS in the future. The CSS system is ten years old and is becoming more costly to maintain. Also, the CSS is installed on the OpenVMS computer operating system, for which support by independent software vendors is in decline.

The CSS is the Company's largest and most complex application. The study will examine whether feasible alternatives to replacement exist that will extend the useful life of the CSS while mitigating the risk associated with declining industry support of the OpenVMS operating system.

Customer Impact

This project will contribute to the Company's ongoing efforts to achieve operating efficiencies and improve customer service.

Project Justification

The Company currently depends on the CSS to track customer information, bill customers and respond to customer inquiries. The CSS is used to process approximately 2,500,000 customer bills, 500,000 customer telephone calls and 130,000 service orders yearly. Without a system like the CSS, the Company would be unable to provide an acceptable level of service to its customers.

Due to declining industry support for OpenVMS, there is a risk associated with running such critical software applications as the CSS on the OpenVMS operating system. This study will assess the implications of this risk.

All materials and services for this project will be purchased after examining the competitive bids of prospective suppliers. Where alternative suppliers do not exist, all materials and services will be negotiated with a sole-source supplier to ensure least cost.

Future Commitments

None.

FACILITIES MANAGEMENT

Project Cost

$562,000

Nature of Project

This is the completion of a 2002 project to improve the tracking and scheduling of maintenance activities associated with the Company's generation, substation and distribution electrical equipment.

The Company's facilities management application (known as MP2) has functional deficiencies. This project, as described in the Company's 2002 capital budget application, contemplated an expansion of the MP2 application. However, it has since been determined that, in order to provide the Company with more effective facilities management and preventative maintenance capabilities, the application must be replaced.

This project will also address the replacement of several applications that currently run on the OpenVMS operating system. These include:

- Transmission Line Inspection System
- Street Light Management System
- Protective Equipment System
- Pole Management System
- Metering Equipment System

Customer Impact

Establishment of an effective facilities management capability will allow the Company to improve operating effectiveness and enhance the Company's ability to respond to customers' service requirements.

Project Justification

An improved facilities management system will enable more effective management of company assets. Properly maintained assets such as relays and transformers are important for the provision of a reliable and safe electrical system.

FACILITIES MANAGEMENT (Cont'd)

Due to declining industry support for OpenVMS, the business risk associated with running software applications on the OpenVMS operating system is unacceptable to Newfoundland Power.

All materials and services for this project will be purchased after examining the competitive bids of prospective suppliers. Where alternative suppliers do not exist, all materials and services will be negotiated with a sole-source supplier to ensure least cost.

Future Commitments

None.

NETWORK INFRASTRUCTURE

Project Cost

$542,000

Nature of Project

This is a two-year project involving the replacement of aging network components that no longer support the business needs of the Company or are no longer supported by the vendor.

This project involves:

a) *The upgrade/replacement of network equipment in St. John's* that connects the Company's Head Office on Kenmount Road to the Duffy Place office building. The existing network equipment in these buildings is aging and no longer provides the capacity required to connect shared servers and other network equipment to the corporate network. ($255,000)

b) *The replacement of network equipment in offices outside of St John's* that is used to transport SCADA, VHF radio, and corporate data from these offices back to St. John's computer facilities. The existing equipment is no longer manufactured, no new software upgrades are available, and new parts can no longer be purchased. ($260,000)

c) *The purchase of additional communications equipment* to provide connectivity between the SCADA network and the SCADA computers at the backup computer facility at Duffy Place. This equipment is required in order to provide remote monitoring and control of the electrical system in the event of a communications equipment failure at the System Control Centre at Topsail Road. ($27,000)

Customer Impact

This project will contribute to the Company's ongoing efforts to achieve operating efficiencies and improve customer service.

NETWORK INFRASTRUCTURE (Cont'd)

Project Justification

The network is used by employees to access applications like the Customer Service System and the SCADA system that reside on shared servers. The additional network capacity that will be provided at the Company's computer rooms at Kenmount Road and Duffy Place is required to maintain an acceptable level of network performance for employees who use these applications to perform their employment duties.

The project will also reduce the Company's reliance on technology that is no longer manufactured. The network components that need to be replaced connect Company offices across the province to the St. John's offices. Due to the lack of support for these network components, the business risk associated with running software applications and SCADA on these components is unacceptable to Newfoundland Power.

All materials and services for this project will be purchased after examining the competitive bids of prospective suppliers. Where alternative suppliers do not exist, all materials and services will be negotiated with a sole-source supplier to ensure least cost.

Future Commitments

Further expenditures of $305,000 are estimated for 2004.

OPERATIONS SUPPORT SYSTEMS

Project Cost

$383,000

Nature of Project

This is the completion of a 2002 project to replace a number of computer applications used by the Company's operations and engineering personnel for the estimating, scheduling and tracking of projects and other related field work. The total expenditure on this two-year project is lower than initially anticipated because the Company is able to achieve some of the project's objectives by availing of the capabilities of information technology systems either implemented in 2002 or to be implemented in 2003 through the Business Support Systems and Facilities Management capital projects.

Customer Impact

Implementation of a computer application for managing work in the Company's engineering and operations groups will improve operating effectiveness and enhance the Company's ability to respond to customers' service requirements.

Project Justification

There is an opportunity to improve operating efficiency and customer service through enhanced work management in the operations and engineering areas of the Company. Work planning, scheduling and tracking is currently supported by a variety of systems. The implementation of new software will eliminate the need for manual coordination between these systems and increase productivity.

One of the applications remaining to be replaced in 2003, the Switching Order System, runs on the aging, proprietary computer operating system known as OpenVMS. Due to declining industry support for OpenVMS, the business risk associated with running software applications on the OpenVMS operating system is unacceptable to Newfoundland Power.

OPERATIONS SUPPORT SYSTEMS (Cont'd)

All materials and services for this project will be purchased after examining the competitive bids of prospective suppliers. Where alternative suppliers do not exist, all materials and services will be negotiated with the sole-source supplier to ensure least cost.

Future Commitments

None.

OUTAGE MANAGEMENT

Project Cost

$284,000

Nature of Project

This project will involve the replacement of the principal applications that support the Company's ability to respond to electrical system failures and incoming customer trouble calls. The principal applications to be replaced are the Problem Call Logging System and the Interruption Reporting System.

Customer Impact

This project will contribute to the Company's ongoing efforts to ensure the reliability of the electrical system and improve customer service.

Implementation of a new Outage Management System will ensure the Company continues to respond efficiently and effectively to widespread power outages as well as to customer trouble calls.

Project Justification

This project will result in the replacement of a number of systems currently running on the Company's aging, proprietary computer operating system known as OpenVMS. Due to declining industry support for OpenVMS, the business risk associated with running software applications on the OpenVMS operating system is unacceptable to Newfoundland Power.

While the replacement of these applications is necessary to address the OpenVMS issue, this project will also provide an opportunity to improve customer trouble call response time through functional enhancements.

OUTAGE MANAGEMENT (Cont'd)

All materials and services for this project will be purchased after examining the competitive bids of prospective suppliers. Where alternative suppliers do not exist, all materials and services will be negotiated with a sole-source supplier to ensure least cost.

Future Commitments

None.

PERSONAL COMPUTER INFRASTRUCTURE

Project Cost

$634,000

Nature of Project

This project is necessary for the replacement or upgrade of personal computers, printers and associated assets that have reached the end of their useful life. Of the Company's total of 602 personal computers, 123 desktop computers and 17 laptop computers will be replaced. This is in keeping with the Company's expectation of a three to four year life cycle for personal computers.

The project also involves the replacement of eight laser printers, several scanners, and other peripheral equipment.

The Company annually reviews its personal computing requirements in detail as a part of its capital budgeting process.

The following table contains a projection of the number of personal computers in the Company at the end of 2003.

PCs	2001 Total	2002 Plan			2003		
		Added	Retired	Total	Added	Retired	Total
Desktop	522	134	166	490	123	123	490
Laptop	111	29	28	112	17	17	112
Total	**633**	**163**	**194**	**602**	**140**	**140**	**602**

Customer Impact

This project will contribute to the Company's ongoing efforts to achieve operating efficiencies and improve customer service.

PERSONAL COMPUTER INFRASTRUCTURE (Cont'd)

Project Justification

This project will enable the Company to accommodate application enhancements and new applications while maintaining current performance standards. The replacement of personal computer infrastructure and the reassignment of older, less powerful personal computers to users with lesser capacity requirements will extend the useful life of personal computers and reduce costs.

All materials and services for this project will be purchased after examining the competitive bids of prospective suppliers.

Future Commitments

None.

SHARED SERVERS INFRASTRUCTURE

Project Cost

$1,411,000

Nature of Project

This project is necessary to maintain current performance on the Company's shared servers and to provide the additional infrastructure needed to accommodate new and existing applications. This involves the replacement and upgrade of disks, processors, and memory, as well as security and monitoring software.

This project involves:

a) *Server upgrades and replacements* for the existing infrastructure including new servers, disks, processors, memory, tape backup units and storage cabinets. ($404,000)

b) *Two new servers* to accommodate the Outage Management application. ($36,000)

c) *Monitoring and security software* including associated training/consulting to maintain and improve current monitoring and security procedures to protect the Company's technology investment. ($168,000)

d) *Upgrade of the Call Centre Technology (CTI).* The vendor, Aspect Telecommunications, will not support the current version of the CTI module of the Call Centre Technology beyond 2002. The CTI module provides customers 24-hour access to their account information and is a critical technology component in the provision of service to customers. ($278,000)

e) *Hardware and software upgrades to the SCADA computer system*. This includes replacement of the existing disk storage, and upgrades to the Unix operating system and SCADA software. ($525,000)

Customer Impact

This project will contribute to the Company's ongoing efforts to achieve operating efficiencies and improve customer service.

SHARED SERVERS INFRASTRUCTURE (Cont'd)

Project Justification

This project is justified on the basis of the need to provide additional capacity to support new applications and to maintain the performance of the Company's servers. Some of the Company's major shared servers are used by as many as 400 employees at one time. Degradation of server performance can have a negative impact on employee productivity, customer service, and the integrity of stored corporate data.

All materials and services for this project will be purchased after examining the competitive bids of prospective suppliers. Where alternative suppliers do not exist, all materials and services will be negotiated with a sole-source supplier to ensure least cost.

Future Commitments

None.

Newfoundland Power Inc.
2003 Capital Budget
Leases over $5,000

	Estimated Annual Lease Amount	Term
Photocopiers	$70,000	5 Years
Facsimile Machines	$15,000	5 Years
Mailing Machine	$ 9,000	5 Years

Conditions for Future Filings

NP shall file future capital budget applications in accordance with the following guidelines and conditions:

i) A concise description of the project, including classification and location.
ii) The projected cost of the project in the budget year, showing a breakdown of material costs, labour costs (internal and external), engineering costs, and other associated costs where appropriate.
iii) The anticipated future expenditures; shown by year, of the project.
iv) The current age of any plant being replaced or overhauled.
v) The measurable usage to date of any plant being replaced or overhauled.
vi) The date and cost of the most recent overhaul, repair, or replacement.
vii) Copies of any engineering studies, consultants' reports, environmental studies, or dealer documentation outlining the current condition and future requirements of the plant. If these documents are already on file with the Board, reference may be made to these documents
viii) A cost benefit analysis of all alternatives, both internal and external, that have been considered, including any DSM measures that have been evaluated.
ix) A description and related documentation outlining the results of any discussions of the project that have taken place between the utilities in an effort to reduce expenditures by avoiding duplication of services, or increased sharing of resources and expenses.
x) Documentation of any safety or reliability issues that have arisen, in this jurisdiction or elsewhere, indicating a need for the project at the time. (Describe any efforts that have already been made to deal with these issues, and outline any related costs that have been incurred.)
xi) Documentation, including maintenance records and reports of outages, that indicate whether this project is remedial or preventative, and that support the current undertaking of the project.
xii) A general description of any major replacements, upgrades, or repairs to this plant that are expected to be undertaken within the next three years.