DELIVERED BY HAND

October 28, 2002

Board of Commissioners of Public Utilities
P.O. Box 21040
120 Torbay Road
St. John's, NL A1A 5B2

Attention: G. Cheryl Blundon
Board Secretary

Ladies and Gentlemen:

Re: 2003 Capital Budget Application

Enclosed are 15 copies of Newfoundland Power's Prefiled Testimony and Exhibits for each of:

1. Messrs. Philip Hughes and Barry Perry,
2. Mr. Earl Ludlow, and
3. Ms. Nora Duke and Mr. Peter Collins.

For convenience, the Prefiled Testimony and Exhibits are provided on three-hole punched paper with appropriate tabs for insertion in the binders forwarded to you on August 2, 2002.

In addition, enclosed are 15 copies of Schedule B, Page 61 of 82 (1st Revision) which revises the number of units proposed to be purchased in 2003 under the Transportation category.

Copies of the enclosed have been forwarded directly to Newfoundland and Labrador Hydro and the Consumer Advocate.

I trust the enclosed is satisfactory; however, if you have any questions, please do not hesitate to contact me at your convenience.

Yours very truly,

Peter Alteen
Corporate Counsel
& Secretary

Enclosures

c. Maureen P. Greene, Q.C. and
Mr. Geoffrey Young
Newfoundland & Labrador Hydro

Mr. Dennis Browne, Q.C. and
Mr. Stephen Fitzgerald

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.

IN THE MATTER OF the *Public Utilities Act*, (the "Act"); and

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

(a) approving its 2003 Capital Budget; and
(b) fixing and determining its average rate base for 2001 in the amount of $545,162,000.

Prefiled Testimony and Exhibits of Philip Hughes and Barry Perry

NEWFOUNDLAND POWER
A FORTIS COMPANY

At the hearing into Newfoundland Power's 2003 Capital Budget Application, the following Evidence will be adopted by Philip Hughes, C.A., President & Chief Executive Officer of Newfoundland Power and Barry Perry, C.A., Vice President, Finance & Chief Financial Officer of Newfoundland Power.

Witness profiles for Philip Hughes and Barry Perry follow.

Philip Hughes, C.A.
President & Chief Executive Officer
Newfoundland Power Inc.

Philip Hughes has served as President & Chief Executive Officer of Newfoundland Power Inc. since 1997.

From 1995 to 1996, Mr. Hughes was President & Chief Executive Officer of Maritime Electric Company Limited. He joined Maritime Electric as Vice President, Finance & Chief Financial Officer in 1992.

From 1990 to 1992, Mr. Hughes was President & Chief Executive Officer of Trans Gas Limited, a natural gas transmission company in Regina, Saskatchewan. From 1988 to 1991, he served as Vice-President, Finance & Chief Financial Officer of SaskEnergy.

Mr. Hughes is currently Chair of the Energy Council of Canada and is a Director and past Chair of the Canadian Electricity Association.

Mr. Hughes has testified before the Board of Commissioners of Public Utilities of Newfoundland and Labrador on several occasions in his capacity as President & Chief Executive Officer of Newfoundland Power Inc.

Mr. Hughes is a graduate of the University of Lancaster (B.A. (Hons.) Economics, 1977). He is a member of the Institutes of Chartered Accountants of Alberta and Newfoundland and a Fellow of the Institute of Chartered Accountants of England and Wales.

Barry Perry, C.A.
Vice President, Finance & Chief Financial Officer
Newfoundland Power Inc.

Barry Perry joined Newfoundland Power in 2000 as Vice President, Finance and Chief Financial Officer.

Prior to 2000, Mr. Perry was Vice President-Treasurer with Abitibi-Consolidated Inc. (Abitibi), Quebec. Mr. Perry commenced employment with Abitibi as Chief Financial Officer of the Company's International Business Unit which included the two newsprint mills and woodland operations located in Newfoundland. Mr. Perry has also served as Director, Financial Reporting for Abitibi.

Prior to joining Abitibi-Consolidated Inc., Mr. Perry was Corporate Controller of Newfoundland Processing Inc., the owner/operator of the Come by Chance Oil Refinery.

Mr. Perry obtained his Chartered Accountant designation while working with Ernst & Young Chartered Accountants in St. John's, Newfoundland.

Mr. Perry is a graduate of Memorial University of Newfoundland (Bachelor of Commerce (Honours), 1986) and is a member of the Institute of Chartered Accountants of Newfoundland.

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SUMMARY OF EVIDENCE

Newfoundland Power is managing and operating its assets efficiently with a view to delivering service to its customers at the lowest possible cost consistent with reliable service.

Newfoundland Power's capital budget for 2003 totals $55.8 million. The Company's capital expenditures are driven by a number of causes.

The first, asset replacement or upgrading, balances the maximization of asset lives with the proactive replacement of deteriorated or inefficient plant, and accounts for approximately 50 per cent of the 2003 capital budget.

The second area involves responding to customer requirements for new service or additional capacity, and fulfills Newfoundland Power's mandate to serve customers within its service area. Providing electrical service to new customers and meeting increased load from existing customers represents approximately 20 per cent of the 2003 capital budget.

The third area of capital investment is directed towards improving overall productivity, by investing in technology that enables the Company to operate its electrical system more effectively and more efficiently while delivering reliable electrical service to customers at the lowest possible cost. Approximately 10 per cent of the 2003 capital budget is comprised of investments in technology intended to maintain or improve productivity and customer service.

The remaining capital expenditures are driven by a variety of causes. The more prominent of these for the 2003 capital budget include the Aliant Pole Purchase approved by the Board in Order No. P.U. 17 (2001-2002) and the allocation to general expenses capital ("GEC") approved by Order No. P.U. 3 (1995-1996).

Variances in the 2002 capital budget are described in a separate report that has been filed entitled *2002 Capital Expenditure Status Report.*

For the purpose of regulatory continuity, Newfoundland Power is requesting that the Board approve its 2001 average rate base in the amount of $545,162,000.

The 2003 capital budget will be financed by internally generated funds and short term debt until after 2004.

1. CAPITAL EXPENDITURE OVERVIEW

The Electrical Power Control Act, 1994, effectively requires that Newfoundland Power serve its customers at the lowest possible cost consistent with reliable service. Consistent with that mandate, customers rank reliability of supply and price as the most important attributes of electrical service. Capital expenditures play a central role in the fulfillment of the Company's service obligation to its customers.

Newfoundland Power's annual capital budgets over the past 5 years have been focused on the replacement of deteriorated assets; investment in assets related to growth in energy sales and the number of customers; and technology investments aimed at improving customer service and operational productivity.

1.1 Introduction

The electrical utility industry is capital intensive. Newfoundland Power has approximately $1 billion invested in capital plant and equipment.

The ability of Newfoundland Power to meet its statutory obligations to provide quality electrical service to its customers is largely dependant upon the quality and condition of its capital plant.

The ability to efficiently manage and operate Newfoundland Power's electrical system in order to deliver electrical energy to customers at the lowest possible cost consistent with reliable service is also dependant upon the quality and condition of capital plant.

Replacement of electrical plant which is deteriorated, defective or obsolete has been a key focus of Newfoundland Power's capital budgets in recent years.

Another area of capital expenditures relates to the installation of new plant and equipment necessary to meet customer requirements, whether as a result of new customers or increased demand from existing customers.

A third type of investment is related to acquiring assets the function of which is to increase productivity in the management and operation of the electrical system. Increased productivity will reduce operating costs. Such investments can also improve the Company's overall service.

Newfoundland Power manages its business with a view to overall costs.

Since 1992:

- Gross operating expenses have been reduced by approximately 22 per cent on a historical basis (34 per cent on an inflation adjusted basis);
- The workforce has decreased by approximately 33 per cent;
- The number of customers served has increased by approximately 10 per cent; and
- The volume of energy sales has increased by approximately 10 per cent.

These numbers substantiate the Company's success in improving service to its customers, while at the same time reducing the overall cost of providing that service. This success is in large part a result of the success of the Company's capital expenditure programs to date.

1.2 Asset Replacement

Newfoundland Power has invested approximately $1 billion in fixed assets. The replacement of deteriorated, defective or obsolete assets is a key aspect of capital expenditure for Newfoundland Power and typically accounts for approximately 50 per cent of annual capital expenditures.

Newfoundland Power's approach to capital investment in the electrical system balances the maximization of asset lives with the proactive replacement of deteriorated or inefficient plant. Maximizing the operating life of assets tends to lower overall costs. However, the longer that facilities are exposed to the stresses of the Newfoundland climate, the greater will be the likelihood of failure. In decades past, electrical system plant and equipment was replaced in the normal course of system upgrade or construction to meet the rapid growth in the number of customers and increased customer load demand. In the low growth environment of the last decade, however, this has not occurred to the same extent, with the result that electrical system components have tended to remain in the field longer.

Replacing deteriorated electrical equipment before it causes a service interruption facilitates better planning and enables work to be carried out at lower cost. In a climate where service interruptions often occur at the coldest and windiest time of year, it is essential that power restoration be carried out immediately, often in difficult conditions. This can increase overall costs. In addition, service interruptions also negatively affect the economy of the territory the Company serves. The Company must therefore ensure an appropriate balance is maintained between extending asset life and replacing assets before deterioration causes problems.

Over the last several years, the Company has adopted a more proactive approach to ensuring service reliability by replacing severely deteriorated plant before it can lead to a service interruption. Plant replacement is targeted in areas where failure reports are the highest, where deterioration due to age and exposure is more evident, and where the consequence of an interruption is likely to be more significant.

In determining when to replace defective, deteriorated or obsolete plant, the Company must consider factors in addition to likelihood of failure. For example, safety and environmental factors also influence the timing of plant replacement.

Company programs during the last several years have addressed faulty insulators, deteriorating transformers and the refurbishment of distribution feeders. As a result, much of the Company's electrical system has been improved and is now more capable of withstanding the rigours of the Newfoundland climate. This has helped the Company to achieve reductions in both the frequency and duration of outages.

A key factor affecting the amount of investment to replace deteriorated plant relates to the long life of electrical assets. For the majority of assets in which Newfoundland Power invests, the average useful life is approximately 30 years. Replacing such assets carries significant cost impacts related solely to inflation. Over the past 30 years, inflation has been in the order of 350 per cent. This implies that the replacement cost of a 30 year old asset will be in the order of 3 and one-half times the original cost.

1.3 Serving New Customers

The *Public Utilities Act* requires Newfoundland Power to provide customers in its service territory with electrical service.

In recent years, the proportion of Newfoundland Power's annual capital budget which has been driven by growth in energy sales and the number of customers has been between 10 and 20 per cent. The majority of these expenditures are related to distribution assets such as extensions, meters, services and transformers.

1.4 Technology Investment

1.4.1 Quality of Service

Information technology investments such as the Company's System Control and Data Acquisition ("SCADA") System and enhancements to the Problem Call Logging System have enabled Newfoundland Power to reduce its response time by providing early notification to the Company of power interruptions. This enables more efficient dispatch of service crews and, in some instances, allows the Company to remotely control equipment to restore power without dispatching a service crew at all. All of this improves service reliability, particularly by reducing the length of outages. These types of technology investments also improve operational efficiency.

The Company operates and maintains 23 hydro generating plants, 5 diesel plants, 3 gas turbine facilities, 137 substations and 298 feeders. Of these, 22 hydro generating plants, 71 substations and 184 feeders are now monitored remotely by the SCADA System. The Company will

continue to invest in equipment that can be remotely monitored and controlled by SCADA where it is cost effective to do so.

In addition to improvements in operational efficiency and service reliability, information technology enables improvements in the quality of customers' day-to-day interactions with the Company. Customers' expectations in this regard are constantly evolving. Meeting customers' expectations of enhanced telephone service and a variety of bill payment options requires ongoing investment in information technology.

The Company's most recent customer satisfaction surveys show that the number of our customers who are satisfied with overall service has increased from 70 per cent in 1996 to 90 per cent in 2001 and 2002.

1.4.2 Productivity Improvement

Many of the Company's investments in technology in both customer service and electrical system operations have contributed to productivity improvements in addition to the improvements in the quality of customer service.

For example, as a result of technology improvements in the Customer Contact Centre, the capacity to respond to customer calls is now supplemented by staff in the Company's regional offices during times of peak call volume. The technology also affords callers who simply require account balance information the option of an automated response. In 2001, of 460 thousand customer calls, over 136 thousand were responded to via the automated application and over 17

thousand were responded to by regional staff. These features have reduced the requirement for temporary labour in the Customer Contact Centre.

Planned capital expenditures on information technology in 2003 will facilitate further improvements in the planning of work in electrical systems operations and in the dispatch of operations personnel. Newfoundland Power will continue to make capital investments that will have the effect of reducing the overall cost of service for customers.

The Company's investments in information technology are addressed in the testimony of Nora Duke, Vice-President Customer and Corporate Services and Peter Collins, Manager of Information Services which has been filed in this proceeding.

2. 2003 CAPITAL EXPENDITURES

This section of the evidence outlines the 2003 capital budget of Newfoundland Power and indicates the principal underlying reasons for the investments contained in the capital budget.

The 2003 capital budget totals $55.8 million, including $2.8 million of GEC. As in recent years, the primary focus of the 2003 capital budget is the refurbishment of the aging electrical system.

Exhibit PGH-1 provides a breakdown of the budgeted capital expenditures for 2003 showing the fundamental causes for the expenditures. Approximately $28.4 million, or 50 per cent of the total capital budget, represents expenditures necessary for the refurbishment or replacement of the existing electrical system.

Approximately $11 million, or 20 per cent of the total capital budget, is focused on providing electrical service to new customers and meeting increased load from existing customers. This portion of the budget is driven by the Company's forecast of increases in the number of customers and energy sales. A summary of the Company's most recent forecast, prepared in support of the General Rate Application, is set out in Exhibit BVP-1. The forecast indicates that the number of customers and energy sales will increase by 0.7 per cent and 1.9 per cent respectively in 2003.

Approximately $5.5 million, or 10 per cent of the total capital budget, relates to technology investments in information systems. These expenditures will enable the Company to continue to operate efficiently and improve overall customer service.

The remaining portions of the budget total approximately $10.9 million, or 20 per cent of the total capital budget. The largest items in this are approximately $4 million related to the Aliant pole purchase approved by the Board in Order No. P.U. 17 (2001-2002) and approximately $3.7 million related to GEC, the allowance for unforeseen events, and interest charged to construction.

A more detailed review of the Company's capital planning process and capital expenditure initiatives is provided in the testimony of Earl Ludlow, the Company's Vice-President, Engineering and Operations which has been filed in this proceeding.

3. 2002 CAPITAL EXPENDITURES

This section of the evidence briefly outlines variances in the 2002 capital budget.

The Company has forecast 2002 capital expenditures to be $57.3 million, based on estimates as of June 30, 2002. This is approximately $0.6 million less than the total capital expenditures approved by the Board in Order Nos. P.U. 21 (2001-2002), and P.U. 15 (2002-2003). While the overall expenditure is in line with the approved capital budget, there were a number of variances in individual areas of spending.

Variances can arise due to any number of circumstances including: changes in the work due to third party requirements or field conditions; changes in priority due to new events; changes in engineering or cost estimates; price changes or delays in the delivery of material and equipment; and other unforeseen circumstances that could not be reasonably anticipated during budget preparation.

The details of the individual variances have been filed in a separate report entitled, *2002 Capital Expenditure Status Report*. More current information regarding 2002 capital expenditures and resulting variances will be presented at the hearing of this Application.

4. 2001 RATE BASE

Newfoundland Power's rate base is a cornerstone of the Board's regulation of the Company. For the purposes of regulatory continuity, as part of its capital budget presentation, Newfoundland Power seeks approval of its prior year's rate base.

Rate base, which is principally comprised of the Company's fixed assets, forms the basis of regulation of Newfoundland Power's returns. Schedule F to the Application shows the average rate base for 2000 and 2001. The 2000 average rate base of $520,979,000 was approved in Order No. P.U. 21 (2001-2002). The average rate base for 2001 is $545,162,000, as filed with the Board on March 27, 2002 in Return 3 of the Company's 2001 Annual Return.

Changes to the Company's rate base are principally the result of two factors – capital expenditures and depreciation. Capital expenditures increase the rate base while depreciation expense decreases the rate base. When annual capital expenditures exceed annual depreciation, the rate base increases.

As can be seen in Schedule F, plant investment is the starting point for the calculation of rate base. The increase in the Company's average rate base from 2000 to 2001 is primarily due to increases in plant investment. The plant investment increase is a direct result of the Company's 2001 capital expenditures approved by the Board in Order Nos. P.U. 24 (2000-2001), and P.U. 12 (2001-2002). Plant investment for the year also includes approximately $20 million of joint-use poles purchased from Aliant Telecom Inc, approved by Order No. P.U. 17 (2001-2002).

The other significant variable impacting the average rate base is annual depreciation expense. Each year, annual depreciation expense is calculated using the composite rates approved by the Board. Newfoundland Power's current depreciation rates were approved in Order No. P.U. 7 (1996-97).

5. FINANCING 2003 CAPITAL EXPENDITURES

This section of the evidence outlines Newfoundland Power's current plans for financing its 2003 capital budget.

The funds required to finance the Company's capital program come externally from the issue of debt and internally from generated cash flow. The Company's cash flow is derived from internally generated funds including net income, those expenses on the income statement that do not require an outlay of cash, and changes in working capital.

Internally generated cash flow and short term debt are utilized until short term borrowing requirements approach a level where the Company considers a long term debt financing to be appropriate. The Company monitors capital markets to assess the appropriate timing of long term debt issues.

In late October 2002, Newfoundland Power anticipates closing the issue of $75,000,000 Series AJ First Mortgage Sinking Fund Bonds. The Company currently does not forecast another long term debt issue until after 2004. Until Newfoundland Power issues further long term debt, 2003 capital expenditures will be financed through internally generated funds and short term debt.

Newfoundland Power Inc.
2003 Capital Budget

Overview

	Origin of Expenditure	2003 Capital Budget (000s)	Percentage of Budget
1	Plant Replacement	$ 28,414	50.9
2			
3	Customer/Sales Growth	11,000	19.7
4			
5	Information Systems	5,507	9.9
6			
7	Aliant Pole Purchase	4,044	7.3
8			
9	GEC, Allowance for		
10	Unforeseen & Financial	3,650	6.5
11			
12	System Additions	2,900	5.2
13			
14	Third Party Requirements	275	0.5
15			
16	**Total**	**$ 55,790**	**100.0**

Newfoundland Power Inc.
2003 Capital Budget

Customers and Energy Sales
2003 Forecast Summary[1]

	By Category	Customers	% Change	(GWh) Energy Sales	% Change
1					
2	Domestic	189,949	0.8%	2,867.8	1.5%
3					
4	General Service	20,851	0.5%	1,918.4	2.4%
5					
6	Street & Area Lighting	9,493	0.5%	35.3	0.0%
7					
8					
9	**Total**	**220,293**	**0.7%**	**4,821.5**	**1.9%**
10					
11	**By Region**				
12					
13	St. John's	85,708	1.3%	2,277.3	2.1%
14	Avalon	34,108	0.5%	563.4	1.4%
15	Burin	11,316	0.2%	256.6	5.4%
16					
17	**Eastern Region**	**131,132**	**1.0%**	**3,097.3**	**2.2%**
18					
19	Bonavista	15,761	0.5%	281.0	2.1%
20	Gander	18,618	0.3%	371.7	0.4%
21	Grand Falls	18,655	0.3%	357.7	1.4%
22	Corner Brook	20,028	0.3%	434.8	1.4%
23	Stephenville	16,099	0.2%	279.0	0.8%
24					
25	**Western Region**	**89,161**	**0.3%**	**1,724.2**	**1.2%**
26					
27	**Total**	**220,293**	**0.7%**	**4,821.5**	**1.9%**
28					
29					

30 [1] Forecast summary based on existing rates as filed in the 2003 General Rate Application on October 11, 2002.

IN THE MATTER OF the *Public Utilities Act*, (the "Act"); and

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

(a) approving its 2003 Capital Budget; and
(b) fixing and determining its average rate base for 2001 in the amount of $545,162,000.

Prefiled Testimony and Exhibit of Earl Ludlow

NEWFOUNDLAND POWER
A FORTIS COMPANY

At the hearing into Newfoundland Power's 2003 Capital Budget Application, the following evidence will be adopted by Earl Ludlow, P. Eng., Vice President, Engineering & Operations of Newfoundland Power.

A witness profile for Earl Ludlow follows.

Earl Ludlow, P.Eng.
Vice President, Engineering & Operations
Newfoundland Power Inc.

Earl Ludlow joined Newfoundland Power in 1980 as an Electrical Engineer.

Until 1994, Mr. Ludlow served Newfoundland Power in a variety of capacities including safety management for 2 years, materials management for 4 years and operations management for 7 years.

From 1995 to 1997, Mr. Ludlow served as Vice President, Operations of Maritime Electric Company Limited, Prince Edward Island.

In 1997, Mr. Ludlow was appointed Vice President, Operations of Newfoundland Power and, in 2001, was appointed Vice President, Engineering & Operations of Newfoundland Power.

Mr. Ludlow is responsible for the engineering, operation and maintenance of Newfoundland Power's electrical infrastructure and the delivery of service to almost 220,000 customers through the Company's regional offices.

Mr. Ludlow is currently a member of the *Canadian Electricity Association's* (CEA) Transmission Council and Distribution Council. He chairs CEA's Task Group on Metering & Regulations and is Past Chair of the Task Force on Regional Transmission Organizations.

Mr. Ludlow is an executive member of the Conference Board of Canada's Council for Performance Excellence.

Mr. Ludlow is a member of Memorial University's Engineering and Applied Science Advisory Council and is Chair of the Faculty Development Subcommittee.

Mr. Ludlow has recently been elected as a member of the Board of Regents of Memorial University of Newfoundland.

Mr. Ludlow has testified before the Board of Commissioners of Public Utilities of Newfoundland and Labrador on matters relating to utility operations, capital expenditures, customer service and related costs.

Mr. Ludlow is a graduate of Memorial University (B.Eng. (Elec.) 1980; M.B.A. 1994) and is a member of the Association of Professional Engineers and Geoscientists of Newfoundland.

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SUMMARY OF EVIDENCE

This evidence concerns Newfoundland Power's capital expenditures in the Energy Supply, Substations, Transmission, Distribution, General Property, Transportation and Telecommunications categories.

Newfoundland Power's capital budget is composed of:

(1) expenditures necessary to meet growth in the number of customers served and energy delivered;

(2) expenditures necessary to address reliability, customer service, safety, environmental and productivity requirements; and

(3) expenditures necessary to continue to cost effectively provide service to customers.

Refurbishment of the electrical system to improve reliability is a central aspect of Newfoundland Power's 2003 capital budget. This involves rebuilding distribution and transmission lines which are performing poorly or which have deteriorated components.

Highlights of the proposed 2003 capital expenditures include:

(1) approximately $7.1 million in Energy Supply including $1.5 million on a penstock replacement for the Company's Lockston hydro plant on the Bonavista peninsula and $1.5 million to purchase a portable generator to replace obsolete equipment;

(2) approximately $5.9 million in Substations including $2.4 million for two power transformers;

(3) approximately $4.6 million in Transmission including $2 million to replace conductor on a transmission line on the Burin Peninsula; and

(4) approximately $25.7 million in Distribution which accounts for approximately 46 per cent of the total 2003 capital budget.

1. CAPITAL BUDGET PROCESS

This section of the evidence briefly outlines how Newfoundland Power determines and executes its annual capital budget.

Newfoundland Power's capital budget process begins with the customer and energy forecasts. These forecasts determine expected changes in the number of customers and energy usage by area. The customer forecast influences such budget items as distribution extensions, services, meters, street lighting and transformers. The energy forecast, taken with the maximum loads for the previous year, are used to determine expenditure requirements related to load growth in the Distribution, Substations and Transmission budget categories.

Projects designed to address reliability, customer service, safety, environmental and productivity requirements are developed for all budget categories. In addition, visual and infrared thermoscan inspections, and reviews of system reliability performance, are used to identify facilities that require rebuilding. These budget items are reviewed, and prioritized during consultations amongst departmental staff, managers and executive, and an appropriate capital budget is proposed. The budget is then presented to the Company's Board of Directors for corporate approval, before being submitted to this Board for regulatory approval.

Capital expenditures are reviewed throughout the year to ensure that the circumstances and projections on which the capital plans were based have not changed. When circumstances change, expenditures that are no longer required are cancelled or deferred. When significant unforeseen requirements arise, supplementary regulatory approval is sought.

Again this year, the Company has submitted its capital budget in the 3rd Quarter. Obtaining regulatory approval for the proposed expenditures earlier rather than later in the year would enable the Company to commence detailed construction planning earlier and order materials in advance. In this way, the Company would be in a position to take advantage of opportunities to commence capital work without delay, if winter conditions permit. This would make more time available for construction during the year, and facilitate the better allocation of resources to increase productivity and lower the overall cost to our customers.

2. 2003 CAPITAL BUDGET OVERVIEW

This section of the evidence provides an overview of the principal drivers behind Newfoundland Power's 2003 capital budget expenditures in all categories except Information Systems.

2.1 Introduction

Schedule A to the Application provides a summary of Newfoundland Power's proposed 2003 capital expenditure budget, which totals $55,790,000, including general expenses capitalized. The detailed justifications for the proposed 2003 capital expenditures are found in Schedule B to the Application.

The capital planning process is a deliberate effort to balance customer needs, reliability, productivity, safety and environmental needs with prudent capital expenditures. As circumstances change, so too will capital expenditure priorities.

2.2 System Refurbishment and Improvement

Newfoundland Power's customers continue to rank reliability of supply as one of the most important attributes of electrical service. During the past few years, and continuing in 2003, the most prominent feature of Newfoundland Power's capital program is the effort to improve reliability of supply to customers through refurbishment and enhancement of the electrical system. Since 1999, the Company has focused in particular on the refurbishment of deteriorated plant and equipment, guided by reliability performance indicators such as SAIFI[1] and SAIDI[2], as well as by the results of line inspections and records of individual outages.

In addition, as noted during the presentation of the 2002 capital budget, the Company is increasingly turning its attention to improving service to those customers served by radial transmission and distribution systems in rural areas.

2.2.1 Distribution System Refurbishment

The Company has, in recent years, focused attention on rural distribution feeders where reliability has been below the Company average. Capital expenditures on these feeders in 1999, 2000 and 2001 have helped the Company achieve significant reductions in SAIFI and SAIDI

[1] SAIFI refers to System Average Interruption Frequency Index which 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] SAIDI refers to System Average Interruption Duration Index which 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.

statistics associated with unscheduled distribution outages. Table 1 highlights the improvements achieved. While the statistics relative to the Holyrood feeder do not indicate improvement, this feeder was severely impacted by lightning storms in May, June and July 2002. When the effect of these lightning strikes is removed from the statistics, the SAIFI figure is 2.39 and the SAIDI figure is 2.03.

Table 1

Unscheduled Distribution Outage Performance Indicators for Selected Feeders

Feeder #	Location	SAIFI		SAIDI	
		5-Year Average (1995-1999)	12 Months ending Aug. 31/02	5-Year Average (1995-1999)	12 Months ending Aug. 31/02
DUN-01	Branch/St. Bride's	11.29	1.43	20.75	1.72
RVH-01	Riverhead/St. Vincent's	5.72	0.97	9.43	0.90
OPL-01	Old Perlican	10.43	0.40	32.76	0.71
BLK-02	Whitbourne	8.34	1.25	11.96	0.90
FRN-01	Frenchman's Cove/Benoit's Cove	2.16	0.09	3.25	0.18
FRN-02	Lark Harbour/York Harbour	6.43	0.16	9.75	0.33
ROB-01	St. David's/Robinsons	7.75	3.13	12.69	2.33
ABC-02	Lourdes/Piccadilly	5.64	1.25	5.50	1.43
HOL-01	Holyrood/Salmonier Line	1.59	7.26	8.80	13.98
OPL-02	Old Perlican	2.74	1.28	8.04	0.68
BLA-01	Bay L'Argent	4.68	0.55	12.52	1.55
DOY-01	Doyles	2.51	1.88	4.50	2.41
LAU-02	Lawn	7.56	3.38	22.24	1.36
	Total Company	1.63	1.48	2.76	1.28

In 2003, the Company will continue its effort to refurbish lines that have performed poorly with respect to reliability. These lines are either very old, or are exposed to abnormally adverse

weather conditions. The Distribution Reliability Initiative provides for approximately $1.1 million in capital expenditures in 2003 in the Rose Blanche area, in the Glovertown area, and on the distribution feeder serving Milton and Random Island.

In addition to the Distribution Reliability Initiative, an expenditure of approximately $7.0 million is proposed to replace deteriorated poles, conductors and hardware identified through the visual and infrared thermoscan inspection of the Company's distribution lines. These deficiencies, if not corrected, will cause power outages or create unsafe conditions.

2.2.2 Transmission System Refurbishment

This year's capital budget also provides for the refurbishment of a number of the Company's aged and deteriorated transmission lines. Many of these lines have been in service for in excess of 40 years, and inspections have revealed deterioration resulting from their long exposure to harsh weather and salt contamination. In other locations, it has been determined that the original line design does not provide adequate vertical clearance. Over $4.0 million in expenditures is proposed for the rebuilding of these lines in 2003.

2.3 Radial Systems

Because a radial system is one that relies on a single link between the energy source and customers, the failure of any critical component results in an outage in all of the communities supplied by the radial system. Exhibit EAL-1 is a map of Newfoundland showing a number of the longer radial transmission lines in Newfoundland Power's service territory circled in red.

In general, customers served by radial transmission systems experience more power interruptions than those served by looped transmission systems. There are a number of potential solutions to reduce power outages experienced by radially supplied customers. These solutions include providing additional lines and equipment to serve the customers or installing additional sources of generation.

In its 2002 capital budget, the Company included a project to relocate the gas turbine at Salt Pond to the New-Wes-Valley area in Bonavista North, following a detailed study that determined this relocation was the most cost-effective means of reducing the duration of customer outages. This project, which has been delayed as a result of the unforeseen problems on the Burin Peninsula, will be completed in 2003. In the meantime, the Company is exploring opportunities to reduce outages on other radially fed rural systems.

To lay the groundwork for this effort, the Company will be undertaking an engineering study in 2003 to determine the feasibility of various options for improving reliability of the radial transmission systems serving the Old Perlican/New Chelsea and Port aux Basques/Rose Blanche areas. The study will examine in detail the opportunities to improve customer service in those areas. These alternatives will include the construction of additional transmission lines to form looped transmission systems, and the addition of backup generation.

Similar considerations must also be addressed at the distribution level. In a number of locations in the larger urban centers, it is possible to supply customers from an adjacent distribution feeder if the link to the normal supply is broken. However, since the construction of redundant

distribution lines is costly, distribution systems in rural areas are typically radial. As with radial transmission systems, the alternatives available for reducing outages include the construction of additional lines, the addition of backup generation and the overall strengthening of existing plant and equipment through refurbishment and the introduction of better technology.

The need to replace lost mobile generating capacity as a result of the pending decommissioning of two of the Company's existing portable generators in 2003 also provides an opportunity to reduce outage duration on a radial distribution system. The replacement generation is needed for emergency response. The proposed replacement of this lost generating capacity with a 2.5 MVA portable diesel generator will also enable the Company to improve customer service in a number of ways.

During the winter months, the Company will typically station its portable generators at the end of long radial transmission or distribution lines to serve as backup generation in the event of unscheduled outages. These units may be quickly relocated to areas hit by severe weather to provide power until line crews can repair the damage. They can also be used to minimize or prevent outages during scheduled construction and repairs, allowing the work to be carried out on de-energized lines, lowering construction costs.

This year's budget also includes a project for the refurbishment of the air intake structure on the Company's 7.5 MW portable gas turbine stationed at Port aux Basques, and the replacement of the unit's control equipment. The completion of this project will ensure this portable unit's

continued availability to reduce the impact of outages, and to support construction activities as necessary.

2.4 Technology Improvements

A key factor in reducing the duration of power interruptions is the speed with which problems can be located. This is particularly important on radial systems where customers rely on a single supply source. In many instances, the refurbishment of the Company's deteriorated substation and generation infrastructure involves the replacement of plant and equipment that has been in the field for in excess of 30 years. In the intervening period, there have been a number of advances in utility equipment technology, particularly in the area of automation and remote control. These advances offer opportunities to reduce power restoration times and lower operating costs as deteriorated equipment is replaced.

The Distribution System – Feeder Remote Control project in this year's capital budget is a continuation of a 2002 project involving the installation of modern, multi-function electronic relays and reclosers that can be remotely controlled from the System Control Centre. These devices will enable the System Control Centre to identify on which distribution feeder a fault has occurred and to de-energize feeders in emergency situations. The Company will continue to monitor the performance of these new devices, as well as other distribution automation product developments, to ensure we maximize the benefits of such technologies for our customers.

3. 2003 CAPITAL BUDGET SUMMARY

This section of the evidence provides a summary of the principal proposed 2003 expenditures in each of the Energy Supply, Substations, Transmission, Distribution, General Property, Transportation and Telecommunications categories.

In addition, this section describes three leases for which Newfoundland Power is seeking approval in this proceeding.

3.1 Energy Supply

Proposed Energy Supply expenditures in the 2003 capital budget are $7,076,000, or approximately 13 per cent of the total budget. The following table contains a summary of the proposed expenditures:

Hydro Plants	$ 2,345,000
Thermal Plants	1,561,000
Penstock Replacement - Lockston	1,520,000
Purchase – Portable Generator	1,500,000
Major Electrical Equipment Repairs	150,000
TOTAL	**$ 7,076,000**

Seventeen of the Company's 23 hydro plants will see rehabilitation work in 2003 at a cost of $2,345,000. While the Company's hydro plants are relatively small when viewed as stand-alone production centres, their total combined annual production is approximately 426 GWh, displacing approximately 700,000 barrels of oil burned at Newfoundland and Labrador Hydro's Holyrood Thermal Station. At $28 per barrel, this amounts to about $20 million in annual avoided fuel costs. These plants also contribute to system reliability and, in many cases, provide a source for local backup power. Also included in the 2003 capital budget is a major project

involving the replacement of the deteriorated penstock at the Lockston plant on the Bonavista Peninsula.

Approximately $1,561,000 will be spent on upgrades and equipment replacements at the Company's thermal generating units. These gas and diesel-powered facilities are used to provide emergency power during system problems, to facilitate repair to radial systems and to support the system peak when one or more generation facilities are unavailable. This capability serves our customers well by enhancing reliability in a number of circumstances. Before the Company spends money rehabilitating these plants, it ensures they continue to add value to its customers and to the system.

The 2.5 MW portable diesel generator to be acquired at a cost of $1,500,000 will replace capacity that will be lost when two existing portable generators are decommissioned next year. In the winter, it will be stationed in an area currently served by a radial electrical system. The portability of this unit will provide additional flexibility for the Company during power restoration efforts, as it can be moved to areas that have suffered the worst impact as a result of severe weather. It will also be used to maintain continuous service to customers during construction and maintenance activities that would otherwise require an outage. These activities can be carried out more efficiently, and at lower cost, on de-energized lines.

3.2 Substations

Proposed Substations expenditures in the 2003 capital budget are $5,887,000, or approximately 11 per cent of the total budget. The following table contains a summary of the proposed expenditures:

Rebuild Substations	$ 557,000
Replacement and Spare Substation Equipment	1,107,000
Reliability and Power Quality Improvements	198,000
Substation Protection and Monitoring Improvements	425,000
Distribution System – Feeder Remote Control	1,200,000
Virginia Water- Add 66/12.5 kV transformer	1,150,000
Chamberlains – Add 66/25 kV transformer	1,250,000
TOTAL	**$ 5,887,000**

The Rebuild Substations project include such items as upgrading a section of the Trepassey Substation, the replacement of high voltage switch connectors in substations in the St. John's area and the replacement of underground cable with overhead conductor at several substations on the Burin Peninsula.

The Replacement and Spare Substation Equipment project involves the replacement of items such as circuit breakers, reclosers, potential transformers, batteries and other equipment that either fail in service or have reached the end of their useful lives. This work is required to maintain the reliability and continuity of service to customers and to eliminate potential safety hazards to employees.

The Distribution System – Feeder Remote Control project, which involves the replacement of protective relays and reclosers is a continuation of a project that commenced in 2002. The

Company currently has approximately 140 feeder relays and 200 reclosers that cannot be remotely controlled by the System Control Centre. The reclosers have an average age of 25 years. The replacement program for 2003, which includes approximately 30 relays and 10 reclosers, will focus on improvements in safety, system reliability and operational efficiency, and on the reduction of the environmental risk associated with oil-filled reclosers.

The transformer additions proposed for Virginia Waters and Chamberlains Substations respond to customer growth in two of the highest-growth areas in the Company's service territory. 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.

3.3 Transmission

Proposed Transmission expenditures in the 2003 capital budget are $4,629,000, or approximately 8 per cent of the total budget. The following table contains a summary of the proposed expenditures:

Rebuild Transmission Lines	$ 4,129,000
Transmission System – Engineering Study	$ 500,000
TOTAL	**$ 4,629,000**

The Rebuild Transmission Lines project is a consolidation of a number of smaller projects. The projects include replacement of poles, crossarms, and conductor; replacement of pin type and suspension insulators; and improvement of conductor sag and clearances. Three of the larger

projects included in these expenditures are a $2,000,000 project to replace conductor on a section of transmission line 301L on the Burin Peninsula, the completion of the reconstruction of a section of transmission line 24L from Goulds to Mobile, at an estimated cost of $650,000, and the reconstruction sections of transmission line 124L from Clarenville to Gambo at $500,000. These expenditures are necessary to ensure the continued reliability and safety of the Company's transmission lines.

The Transmission System Engineering Study will evaluate the feasibility of constructing looped transmission line systems in the Old Perlican/New Chelsea area and the Port-Aux-Basques/Rose Blanche area. A looped transmission line system would result in a reduction in both the number of power interruptions and the duration of outages for customers in these areas.

3.4 Distribution

Proposed Distribution expenditures in the 2003 capital budget are $25,707,000, or approximately 46 per cent of the total budget. The following table contains a summary of the proposed expenditures:

Extensions	$ 4,322,000
Meters	674,000
Services	1,819,000
Street Lighting	952,000
Transformers	4,975,000
Reconstruction	2,745,000
Aliant Pole Purchase	4,044,000
Trunk Feeders	6,076,000
Interest During Construction	100,000
TOTAL	**$ 25,707,000**

The proposed expenditures for extensions, services, street lighting and transformers are primarily influenced by growth in the number of customers served by the Company. Expenditure levels are determined with reference to the Company's forecast of new customers using historical expenditures as a guide.

The expenditures for Reconstruction are primarily focused on maintaining reliability and safety. As noted earlier, the Distribution Reliability Initiative and Rebuild Distribution Lines projects are also primarily focused on reliability.

Approximately $275,000 of the expenditures in the Distribution category is associated with the relocation of plant at the request of third parties. A significant portion of the cost of such relocations is recovered from the parties making the requests.

3.5 General Property

Proposed General Property expenditures in the 2003 capital budget are $1,660,000, or approximately 3 per cent of the total budget. The following table contains a summary of the proposed expenditures:

Tools and Equipment	$ 770,000
Additions To Real Property	140,000
Allowance For Unforeseen Items	750,000
TOTAL	**$ 1,660,000**

This category includes expenditures 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 Additions to Real Property project is necessary to maintain buildings and facilities and to operate them in an efficient manner.

The General Property category also includes an allowance for unforeseen items. This allowance is necessary to cover any unexpected capital expenditures.

3.6 Transportation

Proposed Transportation expenditures in the 2003 capital budget are $2,141,000, or approximately four per cent of the total budget.

There are a number of factors that influence the replacement of existing vehicles including kilometres travelled, vehicle condition, operating experience and projected operating expenditures. In 2003, 55 units will be purchased, consisting of 48 passenger and off-road vehicles at a cost of approximately $0.9 million, and 7 heavy fleet vehicles at a cost of approximately $1.3 million.

3.7 Telecommunications

Proposed Telecommunications expenditures in the 2003 capital budget are $383,000 or less than 1 per cent of the total budget. The following table contains a summary of the proposed expenditures:

Replace/Upgrade Communications Equipment	$242,000
Substation Telephone Circuit Protection	141,000
TOTAL	**$ 383,000**

The largest item in the Telecommunications budget is $242,000 to replace or upgrade various communication equipment items such as VHF radios and radio towers. This equipment will contribute to customer service, safety and maintenance of power system reliability by supporting communication between the Company's fleet of mobile vehicles and the various plants and offices across Newfoundland.

3.8 Leases in Excess of $5,000

Schedule C to the Application lists the leases in excess of $5,000 per year that the Company intends to enter into in 2003.

The photocopier lease is for 18 photocopiers to replace 18 photocopiers located throughout the Company's various offices. The previous lease had a term of 3 years and will expire in 2003. The Company is proposing to enter into a 5-year lease for the replacement machines.

The facsimile machine lease is for 40 fax machines to replace 40 facsimile machines located throughout the Company's offices. The previous facsimile machine lease was signed in 1998, with an option to extend for two years. The lease will expire in 2003. The Company is proposing to enter into a 5-year lease for the replacement machines.

The Company's mailing machine is used to weigh outgoing mail and affix postage. The lease on this machine expires in 2003, and the Company intends to replace the machine with a newer model pursuant to a 5-year lease.

4. 2002 CAPITAL EXPENDITURES

This section of the evidence provides an overview of variances from budgeted 2002 capital expenditures. Overall, the forecast variance from the 2002 capital budget is in the order of one per cent.

Schedule E to the Application sets out the approved 2002 capital budget, as well as the forecast of 2002 capital expenditures and resulting variances, as of June 30, 2002. The details of the variances have been pre-filed as a separate report entitled *2002 Capital Expenditure Status Report*. More current information regarding 2002 capital expenditures and resulting variances will be presented at the hearing of this Application.

Variances from budget in the capital expenditures of an electric utility are unavoidable. Because the intervening time between the completion of the budget process and the execution of capital projects can often exceed twelve months, unforeseen circumstances can alter capital requirements substantially. Should any emergency arise which poses a threat to safety or to Company operations, the Company must channel its resources to these areas and make the necessary adjustments to its capital plans. In any given year, the nature of the Newfoundland environment and the weather may also compel the Company to re-examine and refocus its capital plans.

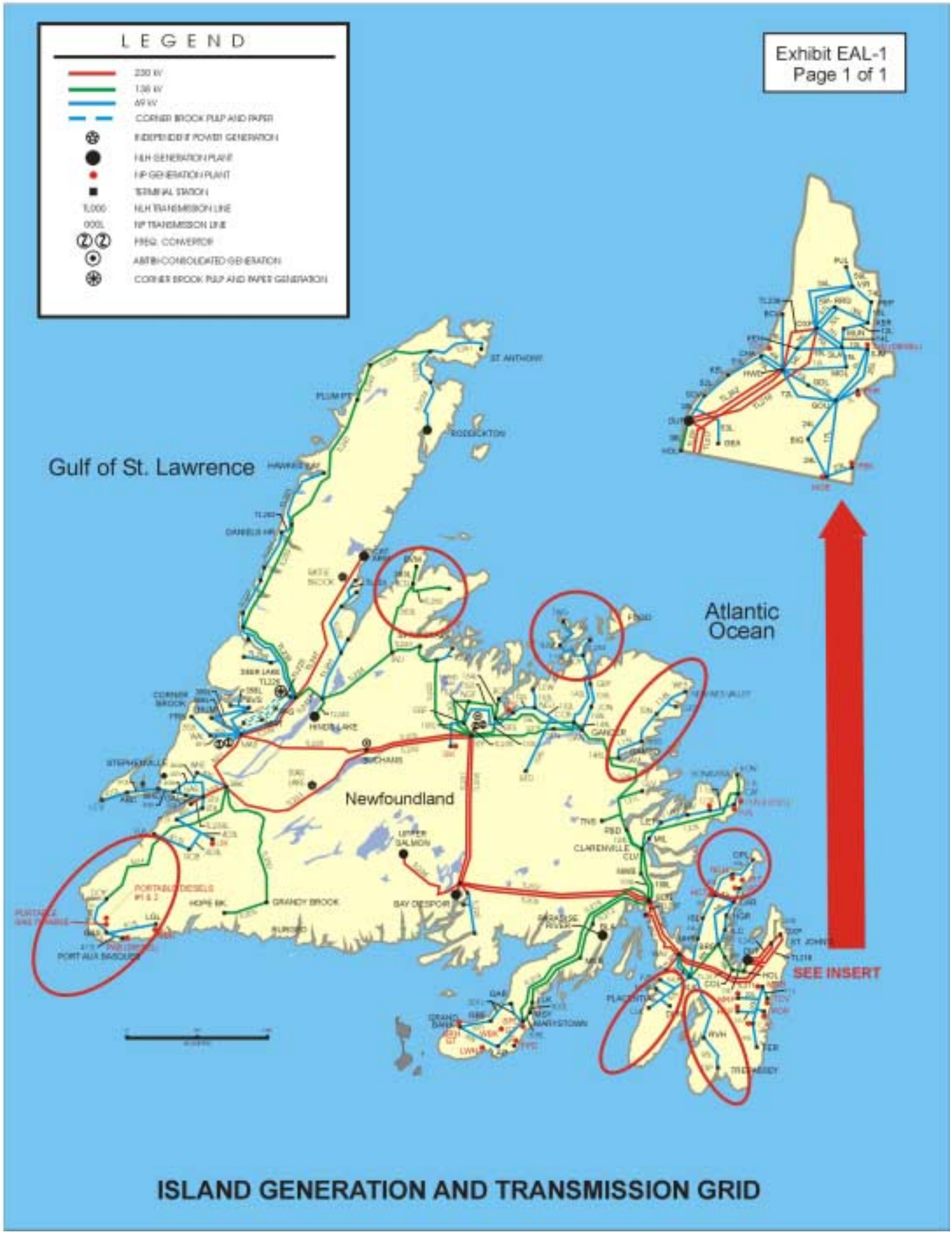
While the overall forecast is only $557,000, (less than one per cent), below the approved budget of $57,839,000, the variances in certain budget categories are more significant.

The Distribution category is the largest component of the capital budget, and the number of individual variances is generally greatest in this area. In 2002, the demands placed on the Company by customer growth and higher than anticipated unit costs for service extensions led to increased expenditures. This resulted in an overall variance of $1.3 million above the approved Distribution capital budget of $27.2 million.

In the Substations category, the long lead-time associated with delivery of the system transformer for the Salt Pond Substation, for which supplementary approval was recently granted by the Board, has resulted in a variance of approximately $1.8 million in one substation project. However, this has been somewhat offset by increases in other projects, resulting in a net variance of approximately $1.2 million below the total approved Substation budget of $7,347,000.

Unforeseen circumstances in ongoing operations can sometimes result in significant capital expenditure variances. As a result of two successive transformer failures at the Salt Pond Substation in April and May 2002, and difficulties experienced in restoring service using the Greenhill Gas Turbine, the Company determined that it was necessary to delay the relocation of the Salt Pond Gas Turbine until 2003. As a result, approximately $1.1 million of the approved 2002 expenditure will not be expended this year. This variance has been partially offset by the necessary refurbishment of a generator that failed at the Seal Cove Hydro Plant in March 2002. The net result is a variance of $574,000 below the initial Energy Supply budget of $7,523,000.

The Company continually reviews its capital program to ensure that only work that is necessary to achieve or maintain customer service objectives is included. If projects can be deferred or cancelled without affecting customer service, reliability, safety, environment or productivity the capital program will be adjusted accordingly. If the changes are significant, the Company will seek the approval of this Board.


LEGEND
230 kV
138 kV
69 kV
CORNER BROOK PULP AND PAPER
INDEPENDENT POWER GENERATION
HLH GENERATION PLANT
HP GENERATION PLANT
TERMINAL STATION
HLH TRANSMISSION LINE
HP TRANSMISSION LINE
FREQ. CONVERTOR
ABITIBI-CONSOLIDATED GENERATION
CORNER BROOK PULP AND PAPER GENERATION
Exhibit EAL-1
Page 1 of 1
Gulf of St. Lawrence
Atlantic
Ocean
Newfoundland
SEE INSERT
ISLAND GENERATION AND TRANSMISSION GRID

IN THE MATTER OF the *Public Utilities Act*, (the "Act"); and

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

(a) approving its 2003 Capital Budget; and
(b) fixing and determining its average rate base for 2001 in the amount of $545,162,000.

Prefiled Testimony and Exhibits of Nora Duke and Peter Collins

NEWFOUNDLAND POWER
A FORTIS COMPANY

At the hearing into Newfoundland Power's 2003 Capital Budget Application, the following Evidence will be adopted by Nora Duke, Vice President, Customer & Corporate Services of Newfoundland Power and Peter Collins, Manager, Information Systems of Newfoundland Power.

Witness profiles for Nora Duke and Peter Collins follow.

Nora M. Duke
Vice President, Customer and Corporate Services
Newfoundland Power Inc.

Nora Duke joined Newfoundland Power in 1986 as a Human Resources Officer.

Ms. Duke served in a variety of roles in human resources until 1989, at which time she was appointed Manager, Human Resources.

In 1999, Ms. Duke was appointed Vice President, Customer and Corporate Services. In this position, she is responsible for Newfoundland Power's customer service, human resources, and corporate administrative functions.

Ms. Duke is a member of the Provincial Advisory Council for Occupational Health & Safety.

Ms. Duke is a member of the Board of Directors of the Newfoundland and Labrador Employers' Council.

Ms. Duke is a member of the Canadian Electricity Association's (CEA) Customer Council.

Ms. Duke testified before the Board of Commissioners of Public Utilities of Newfoundland and Labrador on matters relating to customer service and information technology capital expenditures during the Company's 2000 and 2002 Capital Budget hearings.

Ms. Duke is a graduate of Memorial University of Newfoundland (B. Comm. (Honours) 1983; M.B.A. 1989).

Peter Collins, B. Sc.
Manager, Information Systems
Newfoundland Power Inc.

Peter Collins joined Newfoundland Power in 1986 as a Programmer Analyst.

Until 1998, Mr. Collins served in a variety of roles including systems access analyst responsible for network communications and information security.

From 1998 to 2000, Mr. Collins was responsible for the Company's information technology infrastructure, including personal computers, servers, and networks.

Mr. Collins was appointed Manager, Information Systems, in 2001. In this position, he is responsible for all of Newfoundland Power's information technology infrastructure, applications, security, and the SCADA computer system.

Mr. Collins testified before the Board of Commissioners of Public Utilities of Newfoundland and Labrador in 2001 during the Company's 2002 Capital Budget hearing on matters relating to information technology capital expenditures.

Mr. Collins is a graduate of Memorial University of Newfoundland (B. Sc. (Computer Science and Mathematics) 1985).

Contents

SUMMARY OF EVIDENCE

Newfoundland Power's investments in information technology are essential to the effective and efficient provision of quality, reliable service to customers. Information technology has improved the quality of customers' day-to-day interactions with the Company, and has enabled the Company to operate the electrical system more efficiently.

While the service lives of information technology assets are substantially shorter than those of more typical utility assets, Newfoundland Power's management of information technology adheres to the same principles as its management of the engineered components of the electrical system. Assets lives are extended where it is possible to do so without jeopardizing service levels.

Expenditures in the Information Systems category of the proposed 2003 capital budget consist of:

(1) approximately $2.9 million in Computer Applications expenditures to enhance, upgrade or replace technology tools and software that support business processes; and

(2) approximately $2.6 million in Computing Infrastructure expenditures to enhance, upgrade or replace computer hardware.

1. CAPITAL INVESTMENTS IN INFORMATION TECHNOLOGY

Newfoundland Power's investment in information technology is a central element of the Company's ability to deliver effective customer service and operate the electrical system as efficiently as possible. Like most utilities, Newfoundland Power relies heavily on the ability of information technology to automate and expedite processes, which enables the Company to provide improved levels of service to customers in an efficient manner.

Managing its investment in information technology requires the Company to maintain existing information technology assets long enough to obtain maximum value from the investment, but not so long as to jeopardize reliable service.

1.1 Operational Efficiency and Customer Service

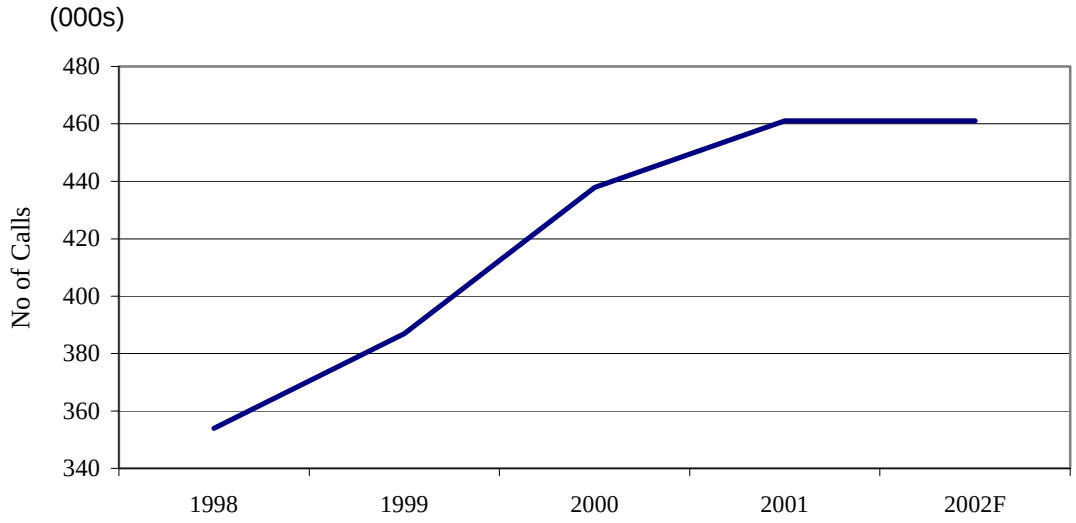
Within the Information Systems category of the Company's annual capital budget are projects designed to ensure that improvements that have been realized in operational efficiency and customer service through investment in information technology are maintained, as well as projects that introduce further improvements in customer service, operational efficiency and public and employee safety.

Exhibit PJC-1 describes the basic components of information technology in use at Newfoundland Power and explains how they are interrelated.

Ensuring the appropriate application of information technology to facilitate efficient work processes and responsive customer service is an ongoing challenge. When used effectively, information technology can improve service reliability, customer service, and productivity. The challenge is to make prudent choices from the wide variety of information technology products available, and to effectively incorporate those products into the Company's operations.

Some of the most significant customer service gains achieved by Newfoundland Power during the last several years have been those enabled by the Customer Service System (CSS) and the introduction of personal computers and the implementation of advanced telephone technology at the Customer Contact Centre. These technological innovations have improved the Company's ability to respond efficiently and effectively to customers' calls respecting billing, credit and other service inquiries. These measures have enabled the Company to respond to increasing call volumes without a corresponding increase in the workforce. Graph 1 shows the annual number of calls answered at the Customer Contact Centre for the period 1998 through 2001, as well as the forecast total number of calls answered for 2002.

Graph 1
Calls Answered at the Customer Contact Centre
1998 to 2002F

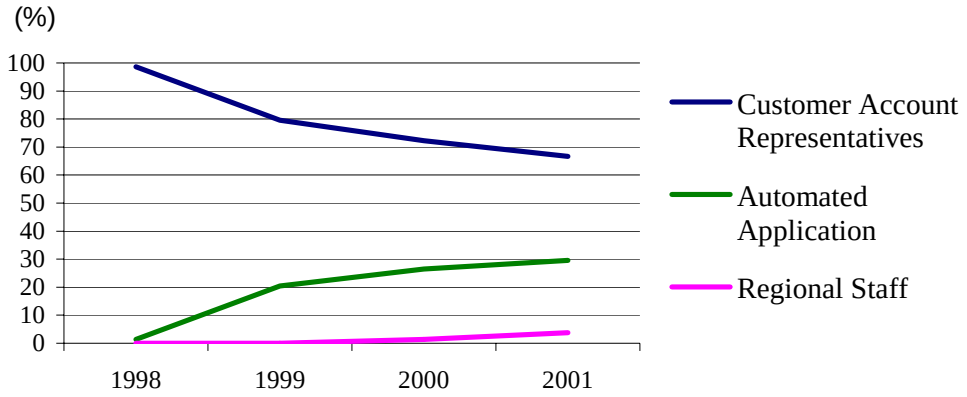


The advanced technology has improved productivity in a number of ways. Customers can choose to speak directly with a Customer Account Representative or, if they desire, they can avail of self-serve options such as the ability to access account balances by telephone. When

customers choose to use the technology to serve themselves, it increases the availability of staff to assist customers with more complex inquiries.

By enabling the seamless interconnection of staff in regional offices with the Customer Contact Centre, peak call volumes can be addressed without increasing temporary labour requirements. Graph 2 shows how the utilization of these customer service options has evolved during the period 1998 to 2001.

Graph 2
Calls Answered by Method: 1998-2001



Increasingly, the Company's efforts identify opportunities to reduce operating costs in the area of electrical system operations and support also present opportunities to improve customer service. For example, the Outage Notification System implemented in 1998 has enabled the Company to more effectively process incoming customer inquiries during power interruptions. Customers calling during an outage now hear a recorded message providing information on the outage in their area. Because the system can process approximately 2,050 customer calls simultaneously per minute, the likelihood of encountering a busy signal has been substantially reduced.

The replacement of an obsolete and inadequate SCADA System in 1999, together with the installation of electronic relays and reclosers, has enabled the Company to reduce field visits by personnel to collect data and change equipment settings and, in some cases, has avoided the need to dispatch a crew to restore power to customers.

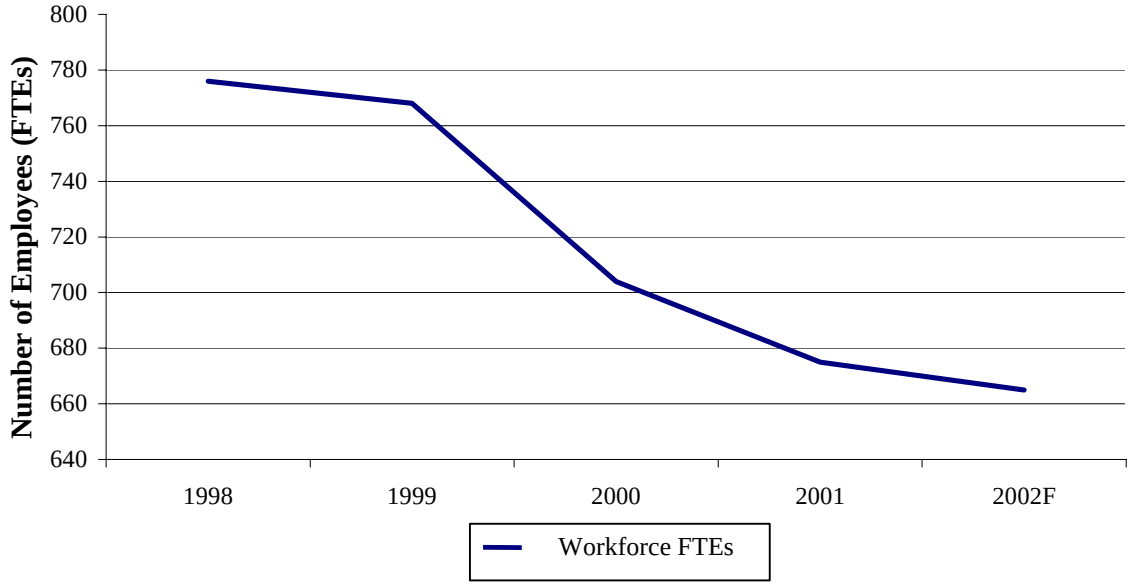
The Operations Support Systems project proposed in the 2003 capital budget is another example of a capital investment that will provide efficiency gains in operations while also improving customer service. The project involves developing a system to better manage the scheduling and prioritization of work for operations personnel, improving the efficiency with which they are dispatched.

The current work scheduling process is largely paper-based, and assigns service requests primarily on a first-come, first-served basis. Although operations staff are able to exercise judgment in relation to the priority of assignments, the ability to distribute work in a manner that ensures the most efficient routing of operations personnel, or that effectively prioritizes calls according to the urgency of customer requirements, is somewhat limited.

When the Operations Support Systems project is completed, the need for manual intervention and paper-based work assignment will be reduced, and work scheduling for operations personnel will benefit from improved call prioritization and route optimization. This will not only improve the efficiency of service call response, but will also provide customers with better estimates as to when they can expect a Newfoundland Power crew to respond to their service requests.

Together with organizational restructuring and process improvement, Newfoundland Power's investment in information technology has facilitated a reduction in the Company's workforce, lowering the overall cost of serving customers. Graph 3 shows the number of employees, expressed as full-time equivalents (FTEs), for the years ending 1998 through 2001, and a forecast of FTEs for year-end 2002.

Graph 3
Workforce: 1998 to 2002



At year-end 2002, the Company forecasts it will be operating with a workforce of 665 FTEs, a reduction of 14.3 per cent since 1998.

1.2 Managing the Investment

To maintain the effectiveness of information technology, it is essential that there be ongoing investment in enhancements and modifications of both hardware and software. Newfoundland

Power manages its investment in information technology on a least cost basis, ensuring that technology investments are aligned with the imperatives of operating efficiency and customer service. Exhibit PJC-2 reviews how Newfoundland Power manages its investments in information technology.

To ensure that information technology costs are minimized, the Company manages and maintains existing information technology assets so as to extend their life, where possible, without jeopardizing reliable service. The Company's practice of "cascading" older personal computers to users with less demanding requirements is one example of this method of management.

While efforts to extend the useful life of information technology assets lowers overall costs, the cost of maintaining technology that is obsolete or no longer meets the Company's requirements can be high. One of the main information technology challenges for the Company lies in determining the point at which it is most cost-effective to completely replace hardware and software rather than continuing to invest in upgrades and enhancements. To ensure the introduction of information technology is as economical as possible, the Company endeavours to introduce technological advances as existing equipment reaches the end of its useful life.

1.3 Obsolescence

Due to the rapid pace of development in the information technology industry, obsolescence is an ever-present challenge to cost management. As technology vendors adapt or retire existing technology products to keep pace with the evolving expectations and business requirements of

their customers, support for older products becomes more expensive and increasingly difficult to find.

The principal issue concerning Newfoundland Power in relation to the obsolescence of information technology involves the OpenVMS operating system. Software vendor support for applications running on this operating system continues to decline. The Company's strategy for dealing with the impending obsolescence of this technology is to balance the costs and risks associated with continuing to rely on it against the cost of replacing the OpenVMS applications.

Newfoundland Power will not install any new applications based on the OpenVMS operating system. In addition, the upgrade and replacement of current computer applications in the normal course will substantially resolve the issue over the next several years.

The 2003 capital budget includes several projects that avail of opportunities to replace OpenVMS-based applications with newer applications that will more effectively address changing customer and operational requirements. A study is also included in the 2003 capital budget that will assess this issue as it relates to the CSS, which is an OpenVMS-based application.

2. 2003 CAPITAL EXPENDITURES

This section of the evidence provides a summary of the principal proposed 2003 expenditures in the Information Systems category.

The Company proposes Information Systems expenditures in the 2003 capital budget of $5,507,000, or approximately 9.9 per cent of the total capital budget. These expenditures are summarized at page 8 of Schedule B to the Application. For clarity, proposed expenditures in the Information Systems capital budget are categorized as relating to either Computer Applications or Computing Infrastructure.

2.1 Computer Applications

The Computer Applications component of the Company's Information Systems capital budget consists of a range of technology tools and software in six different areas that support business processes. The 6 Computer Applications projects represent approximately 53 per cent of the total proposed Information Systems capital budget.

2.1.1 Application Enhancements

Expenditures on Application Enhancements in 2003 will total $766,000. This will involve the upgrading and enhancement of some of the approximately 30 corporate applications. These enhancements are intended to increase efficiencies and enhance customer service while maintaining productivity. For example, the proposal to further integrate the CSS with the new handheld meter reading system will improve service order processing and automate the processing of final meter reads.

The proposal to enhance the Company's Internet website will increase customers' understanding of the factors influencing their consumption of electricity by allowing them to calculate a typical electric bill by entering the specific energy characteristics of their home, including details on their heating system and electric appliances, into an online computer program. The Internet enhancements also include the provision of information on electricity conservation and safety geared towards children.

Other proposed enhancements respond to changing legislative and regulatory requirements. For example, enhancements to the Safety Management System are necessary to accommodate occupational health and safety legislation provisions, including those relating to workplace hazardous materials.

2.1.2 Application Environment

A total of $755,000 will be expended on this project in 2003. It includes upgrades to the software used to develop and test computer applications before they are implemented throughout the Company. Such software is used to ensure new versions of applications will work properly with existing applications, thus avoiding unnecessary downtime when putting new applications into operation. This project also includes the cost of Microsoft productivity software (i.e. word processors and spreadsheets) used throughout the Company, and the reporting and software design tools used by the Company's information technology personnel.

2.1.3 Customer Service System Study

The CSS, which records and stores all customer information, is the backbone of the Company's customer service strategy, supporting all call centre and billing operations. In 2001, Newfoundland Power experienced problems with the CSS and required external resources to fix them. Finding an expert who was conversant with both the Oracle database and the OpenVMS operating system proved difficult.

Such difficulties are a direct result of the decline in industry support for OpenVMS. In light of such difficulties, it is prudent to develop a strategy for managing the risk to this critical application, and a study is proposed for 2003 to assess available options. The cost of the study is budgeted at $170,000.

2.1.4 Facilities Management

The Facilities Management project, budgeted at $562,000, is the completion of a project included in the Company's 2002 capital budget. This year's project involves the replacement of five smaller applications that currently run on the OpenVMS operating system. The functionality of the five applications to be replaced will be provided by a facilities management system that will facilitate more efficient and effective management of maintenance schedules and the tracking of generation and substation assets.

This project will also address the functional deficiencies of the current facilities management application, known as MP2. As the project was originally conceived, the MP2 application was to have been modified and expanded in scope. However, as the project progressed, it was

determined that the existing application could not provide sufficient functionality to support the Company's requirements for tracking maintenance history on assets to support ongoing maintenance planning. Consequently, the MP2 application will be replaced.

2.1.5 Outage Management

The Outage Management project involves the replacement of the two principal applications supporting the Company's response to electrical system failures and to customer reports of problems with their electrical service. The Problem Call Logging System is a central database that contains a chronological log of reported electrical system problems. The Interruption Reporting System is a central database that records outage information such as cause, duration, and the number of customers affected. Replacing these applications will enable the Company to improve reporting and analysis capabilities with respect to trouble calls, which will contribute to the Company's efforts to reduce the duration of outages. It will also eliminate a number of applications that run on the OpenVMS operating system. Expenditures on this project will total $284,000.

2.1.6 Operations Support Systems

The Operations Support Systems project, which commenced in 2002, will be completed in 2003. The 2003 component of the project is budgeted at $383,000. This is a project to replace a number of applications used by the Company's electrical system operations and engineering personnel. The Switching Orders System application is being replaced because it runs on the OpenVMS operating system. This system is essential to ensuring the daily safety of operations personnel working on the electrical system.

A number of the applications are aging and have functional shortcomings. Many are custom-designed applications that were developed in-house over a number of years. Since they are not integrated applications, they require separate resources to manage them and, in many cases, the same data must be entered separately for each application. The applications with which they will be replaced will reduce the need for manual intervention and will provide the Company with improved work scheduling capabilities. This will improve the efficient use of resources, and facilitate improvements in customer service.

2.2 Computing Infrastructure

The Company's computing infrastructure consists of a variety of computer hardware, including personal computers, printers, shared servers, and shared network infrastructure. In 2003, the 3 Computing Infrastructure projects account for approximately 47 per cent of the total Information Systems capital budget.

2.2.1 Network Infrastructure

The 2003 budget includes a proposed expenditure of $542,000 for the Network Infrastructure project. This project involves the upgrade or replacement of aged network components that no longer meet capacity requirements, and the replacement of network equipment that is no longer manufactured and for which software upgrades are unavailable.

The failure of a single network component can result in the loss of network service to several Company offices, thereby affecting employee productivity and customer service. As network

equipment ages, it becomes less reliable. Replacing this equipment will reduce the likelihood of network service interruptions.

Further, because of the current network configuration, the failure of a single primary network component in the SCADA system could imperil remote monitoring and control of the electrical system. The Network Infrastructure project includes the installation of a redundant link to the SCADA system that will eliminate this risk.

2.2.2 Personal Computer Infrastructure

The Personal Computer Infrastructure project covers the replacement and upgrade of personal computers (PCs) and peripheral devices such as scanners and printers. To maximize the life of PCs, Newfoundland Power "cascades" older, less powerful, computers to employees with lesser capacity requirements while newer computers are assigned to those who have the most demanding requirements. The oldest, least reliable systems are retired. This ensures computer requirements are met, while keeping costs to a minimum. The planned expenditure in this category for 2003 totals $634,000.

2.2.3 Shared Servers Infrastructure

The proposed expenditure for the Shared Servers Infrastructure project in 2003 is $1,411,000. This project involves the purchase of additional and replacement shared servers, and the upgrade of existing server infrastructure to maintain current performance. Also included is the purchase of monitoring and security software to ensure the continued integrity and availability of the Company's computer systems.

This project also includes the upgrading of the Company's integrated call centre software and the SCADA software and operating system, which must be upgraded to the latest versions to ensure continued vendor support. The SCADA system's disk storage will also be replaced for the same reason. It is essential that these facilities are upgraded and maintained, so they are available to facilitate responsive customer service and effective and efficient electrical system operations.

3. 2002 CAPITAL EXPENDITURES

This section of the evidence provides an overview of variances from budgeted 2002 Information Systems capital expenditures. Overall, the forecast variance from the 2002 capital budget is in the order of one-half of one per cent.

A summary of the Company's forecast of 2002 Information Systems capital expenditures and the variances from the approved 2002 capital budget are set out in Schedule E to the Application. Detailed explanations for significant variances in 2002 capital expenditures for the Information Systems budget category are found at page 10 of Appendix A of the separate report entitled *"2002 Capital Expenditure Status Report"*, which was filed with the Application. More current information regarding 2002 capital expenditures and resulting variances will be presented at the hearing of this Application.

Capital expenditures in the Information Systems budget category for 2002 are forecast to total $6,272,000, including expenditures of approximately $338,000 incurred in 2001 on three approved 2002 projects. The forecast expenditure is approximately 0.5 per cent lower than the approved 2002 Information Systems budget of $6,298,000. However, there are some more significant individual variances forecast for certain projects.

Expenditures on the Operations Support Systems project are forecast to be approximately $303,000 lower than budget. This is primarily the result of a determination that the Company did not require a fully integrated work management system, and the discovery that a software module could be obtained in conjunction with the Business Support Systems project that would provide some of the required functionality. Information technology can provide opportunities to combine the capacities of various technology components to address business requirements in different areas, lowering overall costs. Newfoundland Power will avail of these opportunities wherever it is feasible to do so.

The Business Support Systems project is forecast to be over budget by approximately $149,000. As the project developed, the Company was able to identify greater opportunities for process automation. The increased scope of the project, and the resulting increase in the need for software modifications, led to the higher expenditure.

An increase of $149,000 in the Shared Servers Infrastructure project arose when it was determined that additional backup capacity and system redundancy was required to ensure the continued availability of the Company's SCADA system in the event of a component failure.

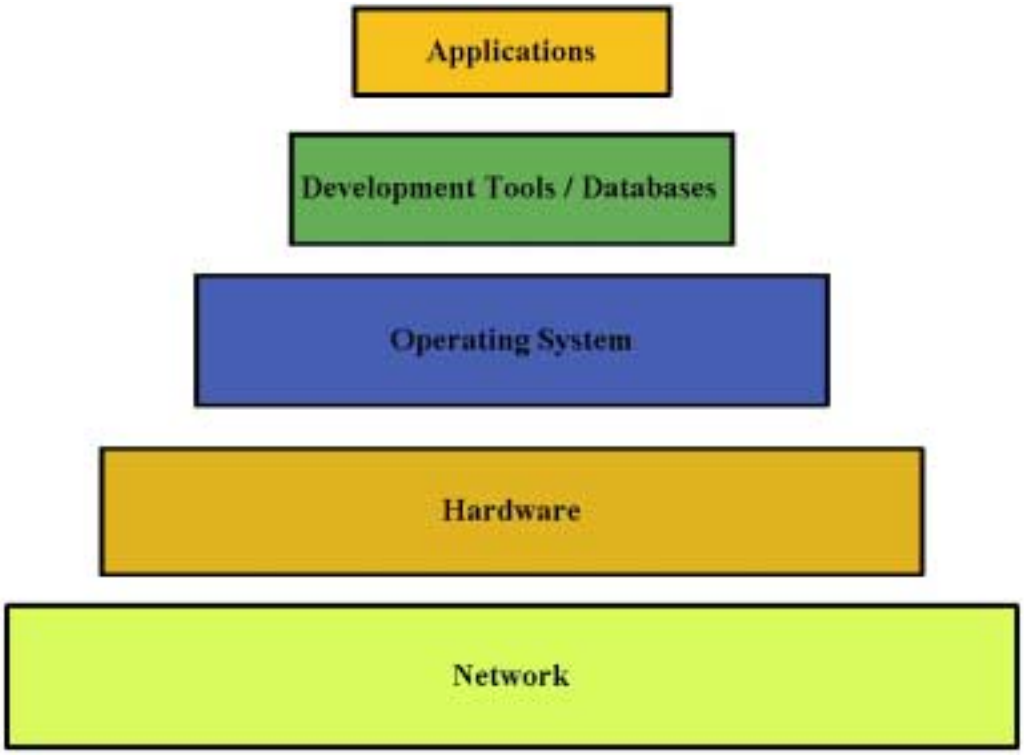
Exhibit PJC-1

INFORMATION TECHNOLOGY BASICS

INTRODUCTION

The term "information technology" encompasses all forms of technology used to create, store, exchange, and use information in its various forms. At Newfoundland Power, there are many different pieces of hardware (computing infrastructure) and software (computer applications) that, in combination, comprise the computer systems that are relied upon to provide service to customers in an efficient manner.

While information technology infrastructure can be complex, the basic structure can be simply illustrated as follows:



THE COMPONENTS OF INFORMATION TECHNOLOGY

The Network

The foundation of the entire information technology infrastructure is the network. The network is made up of all of the devices and telecommunications services that make communication from one piece of hardware to another possible.

A "wide area network" connects Newfoundland Powers offices across the island back to the central computing facilities in St. John's. In turn, each individual office has its own "local area network" whereby all of the local hardware is interconnected. A Customer Account Representative (CAR) in Corner Brook who wishes to access a customer's account uses a desktop computer that is connected via the local area network to the Company's wide area network. The wide area network provides access to the Company's main Customer Service System (CSS) database in St. John's, upon which the required information is stored.

Upgrades and replacements of network components are generally contained in the Network Infrastructure Project in the Company's annual capital budgets.

Hardware

The term "hardware" refers to the personal computers and servers, and peripheral devices such as printers, scanners, modems, and handheld meter reading devices. Hardware is required to run the software applications that support business processes. For example, a shared server allows

employees throughout the Company's offices to access and share information found in applications such as the Problem Call Logging System.

Expenditures related to hardware are typically provided for in the Shared Servers Infrastructure and Personal Computer Infrastructure budget items of the Company's capital budgets.

Operating Systems

Operating systems are computer programs that manage all of the other programs that run on the hardware. An operating system functions as the master control program for a computer, and facilitates the running of applications on the computer and the interaction between the computer and peripheral devices such as printers. OpenVMS, Windows 2000, and Unix are some of the operating systems installed on computers at Newfoundland Power.

Operating system upgrades are typically provided for in Newfoundland Power's capital budgets under the Application Environment and the Shared Server Infrastructure budget items.

Developer Tools and Databases

Developer tools and databases are used to create programs, or applications, that can be installed on operating systems. The developer tools are the computer languages in which applications are written. Databases are used to store information to be accessed by applications. For example, Newfoundland Power's Oracle database contains the customer information records that are accessed by the CSS application.

Developer tools upgrades and enhancements are typically provided for in Newfoundland Power's capital budgets under the Application Environment budget item.

Applications

Applications are the computer programs used by employees to perform their jobs in a productive manner. Newfoundland Power uses a variety of applications to support business processes at the corporate, departmental, and individual employee level.

Many applications are common business tools, such as word processors, spreadsheet programs and electronic mail, while others such as the CSS provide functionality that is specific to the Company's business requirements. These applications may be installed on either personal computers or servers, and must work in conjunction with an operating system.

Applications may be either purchased from software vendors such as Microsoft, or created using developer tools, depending on what is feasible in the circumstances.

Applications upgrades are typically provided for in Newfoundland Power's capital budgets under the Application Enhancements budget item, while requirements for new applications are typically identified separately.

INTERDEPENDENCE

All of the information technology components described above are interdependent. If there is a failure in any one of these components in an information technology system (for example, an electronic mail system), the ability of that system to function as intended will be compromised.

The CSS provides a good illustration of the interdependency of information technology components at Newfoundland Power. The CSS application was written using Cognos developer tools and an Oracle database. The application and database reside on a server that is running on the OpenVMS operating system. The Company's Customer Account Representatives use their personal computers to access the application and database via the Company's network.

If any one of these components is unavailable, the Customer Account Representatives cannot access the information necessary to fulfill customers' service requests and inquiries. It is therefore essential that Newfoundland Power continuously monitor all of the information technology components that are critical to customer service delivery, employee productivity, and electrical system reliability to ensure they are always functioning as required.

Exhibit PJC-2

MANAGING INFORMATION TECHNOLOGY

INTRODUCTION

Information technology is essential to enabling Newfoundland Power to improve customer service levels and ensure the reliability of the electricity supply in a productive manner. Maintaining an effective information technology infrastructure requires ongoing investment.

As functionality requirements evolve and as capacity requirements grow, the Company's information technology assets must be enhanced and modified to keep pace. They must be monitored to ensure they are working properly and to alert technical staff to the possibility of technical problems that might lead to downtime. Like any other equipment, they must also be regularly maintained. Finally, provision must be made for the security of the information technology infrastructure and, in particular, protection from external infiltration.

Newfoundland Power manages its information technology investments in a manner that is consistent with its obligation to provide reliable service to its customers at the lowest possible cost. This requires balancing the need to extend asset life to obtain maximum value from the investment with the need to replace assets before either the cost of maintaining them becomes uneconomic, or they become obsolete from a functional or technical perspective.

Following is a review of each of the elements of information technology management.

ELEMENTS OF TECHNOLOGY MANAGEMENT

Enhancements

Most information technology components require enhancements at some point to extend their useful lives. As business requirements change, software and hardware must be modified to keep pace. Examples of technology enhancements at Newfoundland Power that meet changing customer requirements include changes to billing and customer information systems to accommodate improved payment plan offerings and the introduction of electronic forms to replace paper.

In other cases, the enhancements implement functional improvements, such as the change in the Problem Call Logging System (PCLS) that permitted cross-referencing of customer identification records in the Customer Service System (CSS) with the distribution feeder number to enable better trouble call management, particularly in times of widespread outages.

Information technology enhancements are typically provided for in Newfoundland Power's capital budgets under the Application Enhancements projects.

Upgrades

An upgrade is a modification to a technology component that extends its useful life by improving usability or providing additional features and functionality. Upgrades are typically made available to users by technology vendors as they release newer versions of their products.

A vendor's progression to a new version of a component may also require the upgrade of some or all of the other components in a computer system. For example, if the CSS Oracle database requires an upgrade to fix a technical problem, the operating system and applications using the database may need to be upgraded as well to ensure they continue to work together properly.

Upgrades are typically provided for in Newfoundland Power's capital budgets in the budget item entitled Application Environment.

Maintenance

Maintenance must be performed regularly on all technology components to ensure they are functioning at an optimal level. Typical examples of computer systems maintenance include performance-tuning, repairs to address hardware failures, data corruption fixes, and disk space management.

Monitoring

In order to sustain productivity and customer service levels, technology must remain reliable and available. A number of manual procedures and automatic diagnostic applications are in place at Newfoundland Power to help predict and prevent failures of computer systems. Automatic applications monitor the Company's critical systems, such as the CSS, and notify technical staff when action is required to prevent a failure. These applications ensure virtually continuous availability of the Company's major business applications such as the CSS and the PCLS.

Information technology monitoring applications are provided for in the Company's capital budgets under Shared Servers Infrastructure.

Security

Another aspect of regular maintenance is the protection of the Company's computer systems from external threats. The well-known electronic threats to computer systems include unauthorized access ("hacking") and electronic mail viruses. Computer systems are also subject to physical disasters affecting Company business premises, such as fire, flood, vandalism and sabotage.

In order to minimize the vulnerability of its computer systems to external interference, the Company conducts regular security reviews. These reviews involve assessments by industry experts of the Company's computer security measures, its security processes and practices, and the skill and knowledge levels of employees. The Company's computer security measures, including employee clearances and facility access, are assessed in light of industry best practices. Attempts to "hack" into the Company's computer systems are also conducted in order to confirm the adequacy of existing security measures, particularly those that protect corporate and customer information.

To address the possibility of physical threats, the Company has disaster recovery processes in place, including backup computer facilities at its Duffy Place building in St. John's. In the event of a major disruption to computer services at the Company's main computer facility on

Kenmount Road, these disaster recovery processes will ensure that the Company can successfully recover its computer services in a timely fashion.

The Company' s computer disaster recovery processes include formal and documented action plans that must be updated regularly to reflect changes in the business and computing environment. The Company also conducts regular disaster recovery drills to ensure that participants are adequately prepared and to identify areas where improvement may be necessary.

Ongoing investment in such security measures is necessary to ensure that the Company's computer systems remain effective and reliable.

Capital investments in information technology security are provided for in the Company's capital budgets under Shared Servers Infrastructure.

OBSOLESCENCE

Information technology components eventually become obsolete for either technical or functional reasons. Technical obsolescence occurs when a technology component, such as a PC or a software program, becomes outdated or unreliable, or is no longer supported by the vendor that developed the component. Functional obsolescence occurs when the demands on a computer system evolve to the point where the system is incapable of providing the required functionality in a cost effective manner.

Obsolescence affects all information technology at Newfoundland Power including software, the network, servers, and operating systems. Decline in vendor support for an information technology component can render the component obsolete, whether or not the component remains technically or functionally useful. When this occurs, the Company must assess the costs and benefits associated with supporting the component "in-house" against replacing the component with newer, and supported, technology components.

The Company monitors industry developments to ensure the continued reliability of its information technology resources. Industry information on technical obsolescence enables the Company to take appropriate measures to minimize its impact on the Company's information technology assets. For example, because industry and vendor support for the OpenVMS operating system is in decline, the Company has chosen not to install any new OpenVMS applications and has begun replacing its existing OpenVMS applications.

Obsolescence permeates all aspects of information technology management at Newfoundland Power. Projects to address obsolete technology may be found in any number of the Company's capital budget projects. Examples of Information Systems capital projects for 2003 that contain significant components intended to address obsolete technology include the Facilities Management, Operations Support Systems, and Network Infrastructure projects.

GUIDING PRINCIPLES

Each of the factors reviewed above influences Newfoundland Power's capital expenditure requirements for information technology. To ensure that the Company's investments in information technology are effective and are consistent with the Company's obligation to provide reliable service at reasonable cost, Newfoundland Power has adopted certain standard practices that guide its information technology investment decisions. These practices were outlined in the *Information Technology Strategy Report, 1999-2002* filed with the Board in 1999 and continue to guide the Company's information technology investment decisions today.

These standard practices may be summarized as follows:

- Buy from leading vendors
- Minimize the diversity of installed technology
- Buy rather than build technology
- Consider the cost of the product over its lifespan

Leading Vendors

Buying from leading information technology vendors helps to ensure ongoing industry support and reduces the risk of premature obsolescence. For example, Microsoft has been the market leader in operating systems and office productivity tools during the past decade. In order to improve the likelihood of ongoing vendor support, Newfoundland Power utilizes Microsoft or Microsoft-compatible office productivity applications wherever it is feasible to do so.

Minimize Diversity

By minimizing the diversity of installed technology, Newfoundland Power can reduce spare parts inventories and minimize staff retraining requirements. For example, Newfoundland Power has adopted HP/Compaq servers as its standard for shared server infrastructure. This minimizes the variety of spare parts, such as hard drives and power supplies, required for the Company's servers.

Broad Company experience with HP/Compaq servers also ensures that staff is familiar with the equipment, which reduces training requirements.

Buy vs. Build

Newfoundland Power prefers to buy rather than custom build technology applications. A custom-built application must be designed, developed, implemented, and supported over its entire life by internal staff resources. With purchased applications, the vendor takes on these responsibilities, allowing the Company to allocate its information technology staff to more cost-effective activities. Information technology industry consultant Gartner Group[1] advises that building applications for one's own use is "the most expensive deployment option."[2]

[1] Gartner Group is a research and advisory firm that helps more than 11,000 businesses understand technology including 200 utilities. Founded in 1979, Gartner is headquartered in Stamford, Connecticut and consists of 4,300 associates, including 1,400 research analysts and consultants, in more than 90 locations worldwide.
[2] SMB (small and mid size businesses) Applications Deployment: Build, Buy or Rent? February 2001, Robert Anderson, James Browning and Joseph Outlaw.

Total Life Cycle Costs

Newfoundland Power also considers the cost of a technology product over its entire lifespan when making purchase decisions. The initial cost of purchasing a technology is but one component of the total cost. When Newfoundland Power evaluates technology solutions, the cost of implementing the technology and the cost of supporting the technology over its entire life are evaluated and taken into account before making an investment decision.

Conservative Adoption of Technology

In addition to following the above principles when making information technology choices, Newfoundland Power takes a conservative approach to investing in information technology by only adopting proven technology. This means that Newfoundland Power will purchase information technology only when it has become established and accepted by other users. By benefiting from the experience of others in this way, Newfoundland Power is able to minimize the risks often associated with leading edge technology.

CONCLUDING

Newfoundland Power manages its investments in information technology in a manner that ensures the total cost is minimized over the longer term. By following the practices described above, Newfoundland Power is able to ensure that its information technology purchases are cost-effective.

Where possible and practical, asset life is extended to ensure that the maximum value is attained from the investment. For example, when new PCs are purchased, the PCs that are being replaced are cascaded to other employees, thereby extending the useful life of the PC.

Newfoundland Power must balance cost with risk when making decisions on technology investments. Replacing a technology component is not generally warranted when the product is still performing well. However, as customer service and business requirements evolve, the consequence of not replacing a technology component may outweigh the cost of replacement.

The practices described herein provide a useful framework for making cost-effective decisions in information technology investment.