DELIVERED BY HAND

July 25, 2003

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

Attention: G. Cheryl Blundon
Director of Corporate Services
and Board Secretary

Ladies and Gentlemen:

Re: Newfoundland Power's 2004 Capital Budget Application

A. General

Enclosed are 12 copies each of:

1. Newfoundland Power's 2004 Capital Budget Application and supporting materials in 4 volumes (the "Application"); and
2. Filing Contents of the Application (the "Filing Contents")

Order No. P.U. 36 (2002-2003) (the "Order") materially increased capital budget filing requirements for Newfoundland Power. The Application comprehensively responds to this change in filing requirements.

The following describes the Company's approach to organization of the Application and the contents of the 4 volumes. It is intended to assist in understanding the organization of the Application which is substantially changed from recent capital budget applications of Newfoundland Power.

Telephone: (709) 737-5859 *Email: palteen@newfoundlandpower.com* *Fax: (709) 737-2974*

B. Organization of the Application

General Approach: Newfoundland Power's organization of the Application continues to reflect the nature of its utility assets and its management of those assets. Project categories are substantially the same as those used in recent capital budget applications. This will provide a level of consistency which allows reasonable year over year comparisons.

The Order, and particularly the *Conditions for Future Filings* (Schedule C to the Order), required specific information to be provided with the Application. This information has been provided.

To meet the requirements set out in the Order and provide a reasonable measure of organization of the increased volume of information, the Company chose to layer the overall presentation. The primary layer of information is contained in Volume I. The second layer of information is contained in Volumes II, III, and IV.

Volume I: Volume I contains the Application and supporting Schedules in the format which has historically been submitted to the Board by Newfoundland Power.

Volume I also contains the following reports which the Board has specifically ordered Newfoundland Power file with the Application:

> *2003 Capital Expenditure Status Report:* filed in compliance with paragraph 6, page 28 of the Order;
>
> *Information Technology Strategy 2004 – 2008:* filed in compliance with paragraph 7, page 29 of the Order;
>
> *2004 Capital Budget Plan:* filed in compliance with paragraph 8, page 29 of the Order; and
>
> *Changes in Deferred Charges 2003 – 2004:* filed in compliance with paragraph 5(i), page 120 of Order No. P.U. 19 (2003).

Volume I also contains the prefiled evidence for three witness panels proposed to be called by Newfoundland Power in support of the Application. The prefiled evidence is somewhat shorter than in previous capital budget filings. This is the result of a combination of the increased filing requirements and the Company's desire to avoid undue repetition.

Volumes II, III and IV: Volumes II, III and IV of the Application contain expenditure details, reports and studies. This information is provided to meet the requirements contained in the Order.

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The information contained in Volumes II, III, and IV is divided into capital budget categories, with appendices for those projects for which additional detailed information is required.

Attachments are used to separate supporting material which is typically in the form of engineering reports and studies.

Accessing information in the Application: The material contained in Volume 1, particularly Schedule B to the Application, provides project descriptions, operating experience, project justifications and future commitments. For many, but not all, projects reference will be made in Schedule B to a specific Budget Category and Appendix contained in Volume II, III or IV. In that Appendix, further detail on the project can be found.

The interrelationship between Schedule B to the Application and the expenditure details and supporting materials contained in Volumes II, III and IV may be best described by way of example.

At page 10 of Schedule B to the Application is the description of the Energy Supply project *Hydro Plants Facility Rehabilitation* in an amount of $1,122,000. In that description there is the projected cost breakdown of the total project as specifically required by the *Conditions for Future Filings* and a reference to Volume II, Energy Supply, Appendix 1. In Volume II, Energy Supply, Appendix 1 further expenditure detail by site or electrical component, as appropriate, is provided. Appendix 1 has two attachments. The first is an engineering report dealing the condition of the Topsail Hydro Plant governor, protection and control systems. The second is an engineering report with respect to the condition of the turbine and the stationary seals at the Morris Hydro Plant.

C. Filing Details and Circulation

The enclosed material has been provided in binders with appropriate tabbing. For convenience, additional materials such as Responses to Requests for Information will be provided on three-hole punched paper.

The Filing Contents are provided as a tool to assist the Board in referencing the contents of the Application. The Filing Contents is organized consistent with the tabs contained in the 4 volumes that comprise the Application. Where the description of the contents behind each tab is not apparent from the tab itself, the contents are indicated in ***red*** in the Filing Contents.

A PDF file of the Application will be forwarded to the Board in due course.

A copy of the Application has been forwarded directly to Maureen Greene, Q.C. of Newfoundland & Labrador Hydro and Dennis Browne, Q.C.

D. Concluding

We trust the foregoing and enclosed are found to be in order.

If you have any questions on the Application, please contact us at your convenience.

Yours very truly,

Peter Alteen
Corporate Counsel
& Secretary

Enclosures

c. Maureen P. Greene, Q.C.
Newfoundland & Labrador Hydro

Dennis Browne, Q.C.
Browne Fitzgerald Morgan & Avis

Newfoundland Power
2004 Capital Budget Application
Filing Contents

Volume I
Application, Schedules and Prefiled Evidence

Application

Schedule A ***2004 Capital Budget Summary***
Schedule B ***Capital Projects Explanations***
Schedule C ***Estimate of Future Required Expenditures on 2004 Projects***
Schedule D ***2002 Rate Base***

2003 Capital Expenditure Status Report

Information Technology Strategy 2004 - 2008

2004 Capital Budget Plan

Changes in Deferred Charges 2003 - 2004

Prefiled Evidence: Ludlow / Delaney

Prefiled Evidence: Mulcahy / Collins

Prefiled Evidence: Perry / Hutchens

Volume II
Expenditure Details, Reports and Studies

Energy Supply

Appendix 1 ***Hydro Plant Facility Rehabilitation***

Attachment A ***Topsail Plant Governor, Protection and Control Systems Engineering Review***
Attachment B ***Morris Plant Turbine and Stationary Seal Inspection***

Appendix 2 ***New Chelsea Hydro Plant Refurbishment***

Attachment A ***New Chelsea Plant Planned Refurbishment 2004***

Substations

Appendix 1 ***Rebuild Substations***

Appendix 2 ***Replacement and Standby Substation Equipment***

Appendix 3 ***Feeder Additions due to Load Growth and Reliability***

Appendix 4 ***Increase Corner Brook Transformer Capacity***

Attachment A ***Power Transformer Study, City of Corner Brook***

Transmission

Appendix 1 ***Rebuild Transmission Lines***

Attachment A ***St. John's Transmission Ampacity Review***

Volume III
Expenditure Details, Reports and Studies

Distribution

Appendix 1 ***Meters***

Appendix 2 ***Rebuild Distribution Lines***

Attachment A ***Distribution Inspection Standards***
Attachment B ***Distribution Lightning Arrestors***
Attachment C ***Distribution Insulator Replacement Program***
Attachment D ***Current Limiting Fuses***
Attachment E ***Automatic Sleeve Replacement***
Attachment F ***Porcelain Cutout Replacement***
Attachment G ***Underground Distribution System Replacements in the St. John's Area***

Appendix 3 ***Distribution Reliability Initiative***

Attachment A ***A Review of Reliability (Wesleyville – 02 Feeder)***
Attachment B ***A Review of Reliability (Bay Roberts – 04 Feeder)***
Attachment C ***Pulpit Rock Substation Loading and Reliability***

Appendix 4 ***Feeder Additions and Upgrades to Accommodate Growth***

Attachment A ***Conception Bay South Planning Study***

General Property

Appendix 1 ***Tools & Equipment***

Appendix 2 ***Real Property***

Transportation

Appendix 1 ***Purchase Vehicles and Aerial Devices***

Attachment A ***Details 2004 Capital Budget Vehicle Budget***

Volume IV
Expenditure Details, Reports and Studies

Information Systems

Newfoundland Power
2004 Capital Budget Application
Filing Contents

Volume I
Application, Schedules and Prefiled Evidence

Volume II
Expenditure Details, Reports and Studies

Appendix 4 ***Increase Corner Brook Transformer Capacity***

Attachment A ***Power Transformer Study, City of Corner Brook***

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Volume IV
Expenditure Details, Reports and Studies

Information Systems

Appendix 1 ***Application Enhancements***

Appendix 2 ***Application Environment***

Appendix 3 ***Customer Systems Replacement***

Attachment A ***Customer Service System Replacement Analysis***

Appendix 4 ***Network Infrastructure***

Appendix 5 ***Shared Server Infrastructure***

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

IN THE MATTER OF capital expenditures and rate base of Newfoundland Power Inc.; and

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

(a) approving its 2004 Capital Budget of $53,909,000; and
(b) fixing and determining its average rate base for 2002 in the amount of $573,337,000.

2004 Capital Budget Application

NEWFOUNDLAND POWER
A FORTIS COMPANY

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

IN THE MATTER OF capital expenditures and rate base of Newfoundland Power Inc.; and

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

(a) approving its 2004 Capital Budget of $53,909,000; and
(b) fixing and determining its average rate base for 2002 in the amount of $573,337,000.

TO: The Board of Commissioners of Public Utilities (the "Board")

THE APPLICATION OF Newfoundland Power Inc. ("Newfoundland Power") **SAYS THAT:**

1. Newfoundland Power is a corporation duly organized and existing under the laws of the Province of Newfoundland and Labrador, is a public utility within the meaning of the Act, and is subject to the provisions of the *Electrical Power Control Act, 1994.*

2. Schedule A to this Application is a summary of Newfoundland Power's 2004 Capital Budget in the amount of $53,909,000 which includes an estimated amount of $1,500,000 in contributions in aid of construction that the Applicant intends to demand from its customers in 2004. All contributions to be recovered from customers shall be calculated in a manner approved by the Board.

3. Schedule B to this Application is a list of those 2004 capital expenditures, exclusive of general expenses capital, which comprise Newfoundland Power's 2004 Capital Budget.

4. Schedule C to this Application is an estimate of future required expenditures on improvements or additions to the property of Newfoundland Power that are included in the 2004 Capital Budget but will not be completed in 2004.

5. Schedule D of this Application shows Newfoundland Power's actual average rate base for 2002 of $573,337,000.

6. The proposed expenditures as set out in Schedules A, B and C to this Application are necessary for Newfoundland Power to continue to provide service and facilities which are reasonably safe and adequate and just and reasonable as required pursuant to Section 37 of the Act.

7. Communication with respect to this Application should be forwarded to the attention of Peter Alteen and Brock Myles, Counsel to Newfoundland Power.

8. Newfoundland Power requests that the Board make an Order:

   (a) pursuant to Section 41 of the Act, approving Newfoundland Power's purchase and construction in 2004 of the improvements and additions to its property in the amount of $53,909,000; and

   (b) pursuant to Section 78 of the Act, fixing and determining Newfoundland Power's average rate base for 2002 in the amount of $573,337,000.

DATED at St. John's, Newfoundland and Labrador, this 25th day of July, 2003.

NEWFOUNDLAND POWER INC.

Peter Alteen and Brock Myles
Counsel to Newfoundland Power Inc.
P.O. Box 8910
55 Kenmount Road
St. John's, Newfoundland
A1B 3P6

Telephone: (709) 737-5859
Telecopier: (709) 737-2974

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

IN THE MATTER OF capital expenditures and rate base of Newfoundland Power Inc.; and

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

(a) approving its 2004 Capital Budget of $53,909,000; and
(b) fixing and determining its average rate base for 2002 in the amount of $573,337,000.

AFFIDAVIT

I, Barry Perry, of St. John's in the Province of Newfoundland and Labrador, Chartered Accountant, make oath and say as follows:

1. That I am Vice-President, Finance and Chief Financial Officer, of Newfoundland Power Inc.

2. To the best of my knowledge, information and belief, all matters, facts and things set out in this Application are true.

SWORN to before me at St. John's in the Province of Newfoundland and Labrador this 25th day of July, 2003, before me:

Barrister

Barry Perry

Newfoundland Power Inc.
2004 Capital Budget
Budget Summary
(000s)

Energy Supply	$6,945
Substations	5,199
Transmission	2,315
Distribution	27,636
General Property	709
Transportation	3,487
Telecommunications	120
Information Systems	3,948
Unforeseen Items	750
General Expenses Capital	2,800
Total	**$ 53,909**

Newfoundland Power Inc.
2004 Capital Budget

ENERGY SUPPLY

	(000s)	Details on Page
HYDRO PLANTS - FACILITY REHABILITATION	$1,122	10
NEW CHELSEA – HYDRO PLANT REFURBISHMENT	3,973	12
PURCHASE PORTABLE DIESEL GENERATION	1,700	14
MAJOR ELECTRICAL EQUIPMENT REPAIRS	150	16
TOTAL - ENERGY SUPPLY	**$6,945**	

Newfoundland Power Inc.
2004 Capital Budget

SUBSTATIONS

	(000s)	Details on Page
REBUILD SUBSTATIONS	$1,023	18
REPLACEMENT & STANDBY SUBSTATION EQUIPMENT	1,314	20
TRANSFORMER COOLING REFURBISHMENT	398	22
PROTECTION & MONITORING IMPROVEMENTS	80	24
DISTRIBUTION SYSTEM FEEDER REMOTE CONTROL	1,000	26
FEEDER ADDITIONS DUE TO LOAD GROWTH AND RELIABILITY	200	28
INCREASE CORNER BROOK TRANSFORMER CAPACITY	1,184	30
TOTAL - SUBSTATIONS	$5,199	

Newfoundland Power Inc.
2004 Capital Budget

TRANSMISSION

	(000s)	Details on Page
REBUILD TRANSMISSION LINES	$2,315	32
TOTAL - TRANSMISSION	**$2,315**	

Newfoundland Power Inc.
2004 Capital Budget

DISTRIBUTION

	(000s)	Details on Page
EXTENSIONS	$4,956	34
METERS	1,174	36
SERVICES	1,946	38
STREET LIGHTING	1,242	40
TRANSFORMERS	4,965	42
RECONSTRUCTION	2,461	44
ALIANT POLE PURCHASE	4,044	46
TRUNK FEEDERS		
Rebuild Distribution Lines	4,137	47
Relocate/Replace Distribution Lines For Third Parties	235	50
Distribution Reliability Initiative	949	52
Feeder Additions and Upgrades to Accommodate Growth	677	54
Switch Replacement & Upgrade Underground Distribution – Water Street, St. John's	750	56
INTEREST DURING CONSTRUCTION	100	58
TOTAL - DISTRIBUTION	**$27,636**	

Newfoundland Power Inc.
2004 Capital Budget

GENERAL PROPERTY

	(000s)	**Details on Page**
TOOLS AND EQUIPMENT	535	59
ADDITIONS TO REAL PROPERTY	174	61
TOTAL - GENERAL PROPERTY	**$709**	

Newfoundland Power Inc.
2004 Capital Budget

TRANSPORTATION

	(000s)	Details on Page
PURCHASE VEHICLES AND AERIAL DEVICES	**$3,487**	62
TOTAL - TRANSPORTATION	**$3,487**	

Newfoundland Power Inc.
2004 Capital Budget

TELECOMMUNICATIONS

	(000s)	Details on Page
REPLACE/UPGRADE COMMUNICATIONS EQUIPMENT	$70	64
SUBSTATION TELEPHONE CIRCUIT PROTECTION	50	66
TOTAL - TELECOMMUNCIATIONS	**$120**	

Newfoundland Power Inc.
2004 Capital Budget

INFORMATION SYSTEMS

	(000s)	Details on Page
APPLICATION ENHANCEMENTS	$1,355	68
APPLICATION ENVIRONMENT	791	70
CUSTOMER SYSTEMS REPLACEMENT	226	72
NETWORK INFRASTRUCTURE	393	74
PERSONAL COMPUTER INFRASTRUCTURE	539	76
SHARED SERVER INFRASTRUCTURE	644	78
TOTAL – INFORMATION SYSTEMS	**$3,948**	

Newfoundland Power Inc.
2004 Capital Budget

UNFORESEEN ITEMS

	(000s)	Details on Page
ALLOWANCE FOR UNFORESEEN ITEMS	$750	80
TOTAL – UNFORESEEN ITEMS	**$750**	

ENERGY SUPPLY

Project Title: **Hydro Plants Facility Rehabilitation**

Location: **Various**

Classification: **Energy Supply**

Project Cost: **$1,122,000**

Project Description

This project is necessary for the replacement or rehabilitation of deteriorated hydro plant components that have been identified through routine inspections.

The work includes the replacement or rehabilitation of major components at the following plants: Pierres Brook, Topsail, Morris, Rattling Brook, Heart's Content and Victoria.

The project also includes expenditures necessary to improve the efficiency and reliability of various hydro plants or to maintain environmental compliance. Details on various items are included in Volume II, Energy Supply, Appendix 1.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$655	-	-	-
Labour – Internal	277	-	-	-
Labour – Contract	76	-	-	-
Engineering	114	-	-	-
Other	-	-	-	-
Total	**$1,122**	**$3,013**	**$8,438**	**$12,573**

Operating Experience

The following table gives the expenditures for the past five years for work falling within this project.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$707	$1,670	$1,482	$2,031	$2,778

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

Project Justification

The Company's 23 hydroelectric plants range in age from the 103 year old Petty Harbour Plant to the 5 year old Rose Blanche Plant. The average age is 59 years.

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

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

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

Future Commitments

None.

Project Title: **New Chelsea Hydro Plant Refurbishment**

Location: **New Chelsea, Trinity Bay**

Classification: **Energy Supply**

Project Cost: **$3,973,000**

Project Description

This project involves the complete refurbishment of the New Chelsea hydroelectric generating station. Included in the scope of work is the replacement of the woodstave penstock with a steel pipeline, the replacement of a generator breaker, the rewind of the generator, the replacement of the protection and control systems, the replacement of the governor system and miscellaneous electrical and mechanical work associated with these larger systems.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$3,462	-	-	$3,462
Labour – Internal	260	-	-	260
Labour – Contract	-	-	-	-
Engineering	251	-	-	251
Other	-	-	-	-
Total	**$3,973**	**$0**	**$0**	**$3,973**

Operating Experience

The New Chelsea plant went into service in January 1957. The system has operated continuously since that time and provides normal production of 15.5 GWh of energy on an annual basis. In 1986 remote control through the SCADA system at the System Control Centre was added to the plant. With the exception of that upgrade there has been minimal other capital investment in this facility.

The woodstave penstock has reached a state where significant work is required to patch leaks that develop regularly. The water leaking from the penstock is cause for concern as it undermines the supporting structure of the penstock.

Project Justification

A detailed report, including site assessments completed by Professional Engineers, is included in Volume II, Energy Supply, Appendix 2.

New Chelsea generating station is one of the largest energy producers in Newfoundland Power's group of hydroelectric plants. The original equipment that comprises the plant is forty-eight years old and requires considerable effort to repair and replace components that fail in service, as replacement parts are generally not readily available. The equipment has exceeded its expected life and replacement must be addressed at this time.

The woodstave penstock has experienced failures in recent years that have allowed water to escape. As determined by a recent inspection, in various areas of the steel portion of the penstock the thickness of the wall is below the design parameters as a result of corrosion. The potential exists for damage to property and risk to employee and public safety if a catastrophic failure were to occur.

Concern also exists for the condition of the generator windings, which have exceeded their estimated life expectancy as established by the Institute of Electrical and Electronic Engineers (IEEE). As a result the project will include funds to allow for the rewind of the generator.

Due to age, the protection and control equipment, governor and AC station service equipment is obsolete. Technical support for the original electromechanical devices is very limited, and as a result the current equipment is a mix of technologies created by temporary repairs completed over the years.

The alternative to replacing the penstock and refurbishing this plant would be to retire it. This facility provides normal annual production of approximately 15.5 GWh. Replacing only the energy produced by this facility by increasing production at the Holyrood generation facility would require approximately 25,000 barrels of fuel annually. At a cost of $28 per barrel, this translates into a fuel saving of approximately $700,000 annually.

An economic analysis of the New Chelsea Hydroelectric system, considering this project and the expected capital and operating expenditures required over the next 25 years, indicates a positive net present value.

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

Future Commitments

None.

Project Title: **Purchase 2.5 MW Standby Portable Diesel**

Location: **Corporate**

Classification: **Energy Supply**

Project Cost: **$1,700,000**

Project Description

The project consists of the purchase of a second 2.5 MW portable diesel generation unit. The generator will be stationed during the winter months at Trepassey, except when it is required elsewhere for emergency backup. In the summer months, the unit will be moved as necessary to support construction or repair activities.

Project Cost ($000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$1,571	-	-	$1,571
Labour – Internal	88	-	-	88
Labour – Contract	-	-	-	-
Engineering	26	-	-	26
Other	15	-	-	15
Total	**$1,700**	**$0**	**$0**	**$1,700**

Operating Experience

The two portable generators that the Company previously owned have reached the end of their useful life and have been retired. The *"Portable Diesel Generation: Reliability Analysis Sizing and Unit Location Review"* and the *"Existing Portable Diesel Generation Condition Assessment and Review"* reports were previously filed in response to Request for Information PUB-4.1, Attachments A and B respectively, in the Newfoundland Power 2003 Capital Budget Application.

Project Justification

During the winter months portable generation is normally stationed at substations fed from a radial transmission line. However, when the need arises the units are deployed to areas affected by prolonged outages caused by major winter storms. In the summer time the units enable the Company to maintain energy supply to customers while upgrade or repair work is performed on

de-energized electrical circuits. In addition, as the generation unit will normally be connected to the electrical system, it can also be called upon when needed to support system capacity requirements.

Newfoundland Power presently has one portable gas turbine and one portable diesel generator which is currently being manufactured for delivery in late 2003. The portable gas turbine, which is rated at 7.2 MW, is located at Grand Bay Substation in Port aux Basques, except when it is required for emergencies or construction elsewhere. The 2.5 MW portable diesel generation unit currently being manufactured will also be located at Port aux Basques, except when required elsewhere.

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

Except in the event of an emergency, the Company plans to locate the unit to be acquired in 2004 at Trepassey during the winter, which will maximize overall system reliability.

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

Future Commitments

None.

Project Title: **Major Electrical Equipment Repairs**

Location: **Various**

Classification: **Energy Supply**

Project Cost: **$150,000**

Project Description

This project is necessary to provide for the unanticipated cost of major equipment replacement or rehabilitation occasioned by deterioration or catastrophic failure. Major equipment includes transformers, generators and turbines.

Project Cost ($000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$145	-	-	-
Labour – Internal	5	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	-	-	-	-
Total	**$150**	**$150**	**$450**	**$750**

Operating Experience

The project cost is based on an assessment of historical expenditures. For comparison purposes, the following table gives the expenditures for this project for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$465	$51	$137	$707	$150

Project Justification

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

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

Future Commitments

None.

SUBSTATIONS

Project Title: **Rebuild Substations**

Location: **Grand Bay, Trepassey, Indian Cove, Port Blandford, Wheelers, Stamps Lane, Bay Roberts and Laurentian**

Classification: **Substations**

Project Cost: **$1,023,000**

Project Description

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

Replacement work will take place primarily at the 8 substations noted above, with additional minor work at 5 other substations.

Details are contained in Volume II, Substations, Appendix 1.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$600	-	-	-
Labour – Internal	242	-	-	-
Labour – Contract	3	-	-	-
Engineering	178	-	-	-
Other	-	-	-	-
Total	**$1,023**	**$550**	**$3,616**	**$5,189**

Operating Experience

The following table gives the expenditures for the past five years for this project.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$201	$426	$1,191	$687	$452

Project Justification

The Company has 137 substations varying in age from 2 years to greater than 100 years. The book value of these substations is in excess of $100 million. Infrastructure to be replaced was identified as a result of monthly inspections and engineering studies. These expenditures will ensure reliable service and address safety concerns.

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

Future Commitments

None.

Project Title: **Replacement & Standby Substation Equipment**

Location: **Pepperell, Summerford, Milton, Bonavista, Glenwood, Boyd's Cove, Glovertown, Gambo, Laurentian, Gillams, Dunville, Cape Broyle, Greenhill and Mobile Substation P-435.**

Classification: **Substations**

Project Cost: **$1,314,000**

Project Description

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

The locations where the work will be undertaken in 2004 are noted above. Details are contained in Volume II, Substations, Appendix 2.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$963	-	-	-
Labour – Internal	241	-	-	-
Labour – Contract	-	-	-	-
Engineering	110	-	-	-
Other	-	-	-	-
Total	**$1,314**	**$2,146**	**$8,065**	**$11,525**

Operating Experience

The following table gives the expenditures for the past five years for this project.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$384	$313	$232	$2,716	$1,206

Project Justification

The Company has 137 substations. The major equipment items comprising a substation include power transformers, circuit breakers, reclosers, potential transformers and battery banks. In total the Company has approximately 190 power transformers, 400 circuit breakers, 200 reclosers, 340 voltage regulators, 220 potential transformers and 140 battery banks.

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

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

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

Future Commitments

None.

Project Title: **Transformer Cooling Refurbishment**

Location: **Greenspond, Bishops Falls, Cobbs Pond and Humber**

Classification: **Substations**

Project Cost: **$398,000**

Project Description

This project occurs at the substations identified above and involves the replacement of power transformer cooling radiators that have begun to leak oil as a result of corrosion. This will also address environmental concerns of oil spills due to leaking equipment.

In 2004, radiators will be replaced on the following units:

Greenspond T1	Bishops Falls T1
Cobbs Pond T1	Humber T3

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$222	-	-	-
Labour – Internal	152	-	-	-
Labour – Contract	-	-	-	-
Engineering	24	-	-	-
Other		-	-	-
Total	**$398**	**$250**	**$750**	**$1,398**

Operating Experience

The original radiators supplied with the transformers when they were purchased were coated with primer and enamel based paint for protection from the elements. Exposure to our environment causes the radiators to rust and blister. Eventually the radiators begin to leak at the welded seams and through the thinner cooling panel surfaces.

The original radiators are being replaced with galvanized units, which provide enhanced rust resistance. The new radiators have a life expectancy in the range of 40 years.

The following table gives the expenditures for the past five years for this project.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$15	$206	$0	$0	$0

Project Justification

The cost of this project is justified based on the need to replace equipment to maintain reliable service. Oil is used in a transformer as part of its electrical insulation system. An uncontrolled loss of oil would compromise that system with the resulting failure of the transformer and the interruption of service to customers.

The amounts budgeted are based on equipment inspections and historical replacement requirements, as well as the current inventory of backup equipment.

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

Future Commitments

None.

Project Title: **Protection & Monitoring Improvements**

Location: **Goulds, Gander and Cobbs**

Classification: **Substations**

Project Cost: **$80,000**

Project Description

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

In 2004 work will take place at Goulds involving the installation of a synchro check relay and at the Gander and Cobb's substations as a part of the Tap Changer Control Program.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$25	-	-	
Labour – Internal	25	-	-	
Labour – Contract	-	-	-	
Engineering	30	-	-	
Other	-	-	-	
Total	**$80**	**$45**	**$135**	**$260**

Operating Experience

The following table gives the expenditures for the past five years for this project.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$196	$92	$283	$116	$430

Project Justification

This project will make improvements to the protection and monitoring systems of the selected substations to allow for the safe and reliable operation of these substations.

The project is justified on the basis of maintaining the reliability and safe operation of the electrical system

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

Future Commitments

None.

Project Title: **Distribution System Feeder Remote Control**

Location: **Chamberlains, Pepperrell, Blaketown, Humber, Ridge Road, Bay Roberts, Bayview and Kelligrews substations.**

Classification: **Substations**

Project Cost: **$1,000,000**

Project Description

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

By the end of 2003, the System Control Centre (SCC) will have remote control over 40 feeders through new electronic feeder relays and over 30 feeders through reclosers.

In 2004, 25 feeder relays will be replaced at Chamberlains, Pepperrell, Blaketown, Humber, Ridge Road and Bay Roberts. There will be 6 reclosers replaced in Bayview and Kelligrews substations.

While expenditures are forecasted from 2005 to 2008, beyond 2004, specific locations have not been identified as future maintenance history and operating issues would need to be considered in deciding the actual locations.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$701	-	-	-
Labour – Internal	153	-	-	-
Labour – Contract	-	-	-	-
Engineering	146	-	-	-
Other	-	-	-	-
Total	**$1,000**	**$1,000**	**$4,500**	**$6,500**

Operating Experience

The Company's electromechanical feeder relays and oil-filled reclosers are, on average, 25 years old and are nearing the end of their useful life. All will require replacement over the next few years.

The following table gives the expenditures for the past five years for this project.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$0	$0	$0	$1,092	$1,200

Project Justification

This project is justified on the basis of improvements in safety, operating efficiencies, power system reliability improvements and a reduction in risk to the environment. The report which supports this project, *"Distribution Feeder Remote Control and Relay/Recloser Replacement Review",* was previously filed in response to Request for Information PUB-9.3, in the Newfoundland Power 2002 Capital Budget Application.

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

Future Commitments

None.

Project Title: **Feeder Additions Due To Load Growth and Reliability**

Location: **Chamberlains and Pulpit Rock Substations**

Classification: **Substations**

Project Cost: **$200,000**

Project Description

This project is necessary for the addition of new equipment and/or upgrades in two substations to provide for increased loads due to customer growth.

This project includes the installation of a third 25 kV feeder at the Chamberlains substation and a third 12.5 kV feeder at the Pulpit Rock substation in order to accommodate growth, and reliability issues in the areas served by each substation.

Details are contained in Volume II, Substations, Appendix 3.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$128	-	-	-
Labour – Internal	43	-	-	-
Labour – Contract	-	-	-	-
Engineering	29	-	-	-
Other	-	-	-	-
Total	**$200**	**$344**	**$80**	**$624**

Operating Experience

The following table gives the expenditures for the past five years for this project.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$159	$64	$282	$0	$0

Project Justification

The project is justified on the basis of accommodating customer load growth. The proper sizing of equipment is necessary to avoid overloading conductors and equipment and to maintain system reliability.

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

Future Commitments

None.

Project Title: **Increase Corner Brook Transformer Capacity**

Location: **Walbournes and Bayview Substations**

Classification: **Substations**

Project Cost: **$1,184,000**

Project Description

This project includes the installation of a new 66/12.5 kV 25 MVA substation transformer at Walbournes substation as a replacement for the existing 66/12.5 kV 20 MVA transformer, and then moving the existing Walbournes transformer to the Bayview substation.

Details are contained in Volume II, Substations, Appendix 4, Attachment A.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$913	-	-	$913
Labour – Internal	174	-	-	174
Labour – Contract	-	-	-	
Engineering	97	-	-	97
Other	-	-	-	-
Total	**$1,184**	**$0**	**$0**	**$1,184**

Operating Experience

The overall substation transformer loading in the City of Corner Brook is forecasted to exceed 100% capacity in the 2003 / 2004 winter season. This is based on a total substation transformer capacity of 68.3 MVA compared to a projected load of 68.4 MVA.

Project Justification

Load forecasts for the City of Corner Brook substations indicate that the combined load will exceed the combined capacity of the substation transformers. The addition of another transformer in the system will accommodate this increased load and represents the least cost solution to meeting the forecast load requirements for the city of Corner Brook substations.

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

Future Commitments

None.

TRANSMISSION

Project Title: **Rebuild Transmission Lines**

Location: **Various**

Classification: **Transmission**

Project Cost: **$2,315,000**

Project Description

This project involves the replacement of poles, crossarms, conductors, insulators and miscellaneous hardware due to deficiencies identified during annual inspections, engineering reviews and/or day to day operations.

The work includes major upgrades on transmission lines number 3L, 16L, 38L, 116L, 123L, 124L, 132L and 403L. Expenditures estimated at less than $50,000 for any one line will also take place on approximately 50 other lines.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$1,015	-	-	-
Labour – Internal	492	-	-	-
Labour – Contract	741	-	-	-
Engineering	67	-	-	-
Other	-	-	-	-
Total	**$2,315**	**$3,101**	**$18,018**	**$23,434**

Operating Experience

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

The following table gives the expenditures for the past five years for this project.

Year	1999	2000	2001	2002	2003F
$000s	$1,509	$727	$2,289	$2,976	$4,241

Project Justification

This project is necessary to replace poles, crossarms, conductors, insulators and miscellaneous hardware due to deficiencies identified during annual inspections in order to ensure that such lines provide reliable service to customers and are safe for both the public and line workers.

Detailed information on the projects is outlined in Volume II, Transmission, Appendix 1.

Future Commitments

None.

DISTRIBUTION

Project Title: **Extensions**

Location: **Various**

Classification: **Distribution**

Project Cost: **$4,956,000**

Project Description

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

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$1,660	-	-	-
Labour – Internal	1,491	-	-	-
Labour – Contract	1,148	-	-	-
Engineering	558	-	-	-
Other	99	-	-	-
Total	**$4,956**	**$4,680**	**$11,215**	**$20,851**

Operating Experience

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

The following table shows the annual expenditure for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$2,800	$3,981	$5,404	$5,717	$5,184

Project Justification

This project is justified on the basis of customer requirements.

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

Future Commitments

None.

Project Title: **Meters**

Location: **Various**

Classification: **Distribution**

Project Cost: **$1,174,000**

Project Description

This project includes the purchase and installation of meters for new customers and replacement meters for existing customers. The Company has previously purchased two types of meters, those that must be read manually and those that are capable of being read automatically, commonly referred to as AMR meters. In 2004 the Company proposes the purchase and installation of meters, as noted in the table below.

Program	Number of Meters
Regular Domestic Meters	8,000
AMR Meters	3,000

Project Cost

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$1,000	-	-	-
Labour – Internal	105	-	-	-
Labour – Contract	69	-	-	-
Engineering	-	-	-	-
Other	-	-	-	-
Total	**$1,174**	**$699**	**$1,989**	**$3,862**

Operating Experience

The purchase of new meters is necessary to accommodate customer growth and to replace deteriorated meters. The quantity of meters for new customers is based on the Company's forecast of customer growth. The quantity for replacement purposes is determined using historical data for damaged meters and sampling results from previous years. Sampling is done in accordance with regulations under the Electricity and Gas Inspection Act.

The number of AMR meters required for safety and access issues is based on the Company's assessment of locations where these issues exist. See Volume III, Distribution, Appendix 1, for details.

The following table shows the expenditures for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$560	$564	$569	$674	$674

Project Justification:

The requirement for regular domestic meters is based on customer requirements and Industry Canada regulations. The requirements for AMR meters are based on improving safety for employees, improving accuracy of reads and improving efficiency of operations.

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

Future Commitments

None.

Project Title: **Services**

Location: **Various**

Classification: **Distribution**

Project Cost: **$1,946,000**

Project Description

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

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$601	-	-	-
Labour – Internal	990	-	-	-
Labour – Contract	56	-	-	-
Engineering	280	-	-	-
Other	19	-	-	-
Total	**$1,946**	**$2,099**	**$5,233**	**$9,278**

Operating Experience

The project cost for the connection of new customers is calculated on the basis of historical data. For new services, historical annual expenditures are adjusted for inflation and divided by the number of new customers in each year to derive an average new service cost per customer. Unusually high and low data is excluded from the average. This historical average is then modified by the GDP Deflator for Canada before being multiplied by the forecast number of new customers to determine the budget estimate. A similar process is following for replacement services using historical actual expenditures to replace damaged or deteriorated service wires. Street light customers are excluded for the purpose of this calculation.

The following table shows the expenditures for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$1,419	$1,532	$1,838	$1,843	$1,841

Project Justification

These projects are justified on the basis of customer requirements.

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

Future Commitments

None.

Project Title: **Street Lighting**

Location: **Various**

Classification: **Distribution**

Project Cost: **$1,242,000**

Project Description

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

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$695	-	-	-
Labour – Internal	345	-	-	-
Labour – Contract	144	-	-	-
Engineering	50	-	-	-
Other	8	-	-	-
Total	**$1,242**	**$1,091**	**$3,197**	**$5,530**

Operating Experience

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

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

The following table shows the expenditures for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$800	$911	$935	$1,199	$1,233

Project Justification

These projects are justified on the basis of customer requirements.

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

Future Commitments

None.

Project Title: **Transformers**

Location: **Various**

Classification: **Distribution**

Project Cost: **$4,965,000**

Project Description

This project includes the cost of purchasing transformers for customer growth and the replacement or refurbishment of units that have deteriorated or failed.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$4,965	-	-	-
Labour – Internal	-	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	-	-	-	-
Total	**$4,965**	**$4,600**	**$12,760**	**$22,325**

Operating Experience

The project requirements can be divided into three categories as follows:

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

b) Replacement transformers are based on field surveys of rusty or deteriorated transformers.

c) The "other" category is for transformers required for conversions and upgrades, plus an allowance for contingency (burnouts and storm damage, etc.). This category is estimated on the basis of planned projects and historical data.

The following table shows the expenditures for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$3,190	$4,243	$4,550	$5,194	$4,895

Project Justification

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

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

Future Commitments

None.

Project Title: **Reconstruction**

Location: **Various**

Classification: **Distribution**

Project Cost: **$2,461,000**

Project Description

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

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$526	-	-	-
Labour – Internal	1,098	-	-	-
Labour – Contract	510	-	-	-
Engineering	272	-	-	-
Other	55	-	-	-
Total	**$2,461**	**$2,644**	**$7,535**	**$12,640**

Operating Experience

The project cost is estimated on the basis of average historical expenditures related to unplanned repairs to distribution feeders.

The following table shows the expenditures for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$2,222	$1,888	$2,547	$2,878	$2,745

Project Justification

These projects are justified on the basis of reliability and the need to replace damaged electrical equipment.

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

Future Commitments

None.

Project Title: **Aliant Pole Purchase**

Location: **Corporate**

Classification: **Distribution**

Project Cost: **$4,044,000**

Project Description

This project covers the 2004 installment associated with the Support Structures Purchase Agreement entered into with Aliant Telecom Inc. in 2001.

Operating Experience

Not Applicable.

Project Justification

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

Future Commitments

In accordance with the terms of the Support Structures Purchase Agreement, the final amount of $4,044,000 required to complete the purchase of all joint-use poles within Newfoundland Power's service territory from Aliant Telecom Inc. will be paid in 2005.

Project Title: **Rebuild Distribution Lines**

Location: **Various**

Classification: **Distribution**

Project Cost: **$4,137,000**

Project Description

This project involves the replacement of deteriorated distribution structures and electrical equipment that have been previously identified through ongoing line inspections, engineering reviews, or day to day operations. The total budget estimate for this category is based on individual estimates.

Distribution rebuild projects can involve either the complete rebuilding of deteriorated distribution lines or the selective replacement of various line components based on inspections and engineering reviews. These typically include the replacement of poles, crossarm, conductor, cutouts, surge/lightning arrestors, insulators and transformers.

The work for 2004 includes feeder improvements on approximately 56 of the Company's 300 feeders, upgrades to feeders KBR-05 and SLA-06 in St. John's, replacement of deteriorated padmount transformers and underground services, installation of support for cable termination on Bell Island, upgrades to secondary circuits in Grand Bank/Fortune and work estimated to cost less than $50,000 at a number of other locations. Details are contained in Volume III, Distribution, Appendix 2.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$1,696	-	-	-
Labour – Internal	1,512	-	-	-
Labour – Contract	492	-	-	-
Engineering	103	-	-	-
Other	334	-	-	-
Total	**$4,137**	**$4,051**	**$15,246**	**$23,434**

The following table shows the expenditures for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$1,598	$755	$2,223	$3,210	$3,449

Operating Experience

Distribution feeders are inspected in accordance with Newfoundland Power's distribution inspection standards on a five-year rotation to identify:

a) Deficiencies with plant that are a risk to Public Safety, Employee Safety, or are likely to result in Imminent Failure of a structure or hardware.
b) Transformers containing PCB that need to be replaced.
c) Transformers that must be replaced due to rust.
d) Locations where lightning arrestors are required as per the 2003 Lightning Arrestor Review. See Volume III, Distribution, Appendix 2, Attachment B.
e) Locations where CP8080 and 2-piece insulators still exist. These insulators have a history of failure. See Volume III, Distribution, Appendix 2, Attachment C.
f) Locations where current limiting fuses are required in accordance with the internal memo dated January 11, 2000. See Volume III, Distribution, Appendix 2, Attachment D.
g) Hardware that has high risk of failure, such as automatic sleeves and porcelain cutouts. See Volume III, Distribution, Appendix 2, Attachment E and Attachment F.

In addition to items identified during regularly scheduled inspections noted above, specific engineering reviews and the day to day operations of the Company also identify plant deficiencies that need to be addressed within the capital expenditure program.

Project Justification

The Company has over 8,000 kilometers of distribution lines in service and has an obligation to maintain this plant in good condition to safeguard the public and its employees and to maintain reliable electrical service. The replacement of deteriorated distribution structures and equipment is an important part of meeting this obligation.

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

Future Commitments

None.

Project Title: **Relocate/Replace Distribution Lines for Third Parties**

Location: **Various**

Classification: **Distribution**

Project Cost: **$235,000**

Project Description

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

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$78	-	-	-
Labour – Internal	86	-	-	-
Labour – Contract	60	-	-	-
Engineering	8	-	-	-
Other	3	-	-	-
Total	**$235**	**$235**	**$705**	**$1,175**

Operating Experience

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

The following table shows the annual expenditures for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$596	$769	$585	$390	$293

Project Justification

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

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

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

Future Commitments

None.

Project Title: **Distribution Reliability Initiative**

Location: **Various**

Classification: **Distribution**

Project Cost: **$949,000**

Project Description

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

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$423	-	-	-
Labour – Internal	338	-	-	-
Labour – Contract	98	-	-	-
Engineering	12	-	-	-
Other	78	-	-	-
Total	**$949**	**$1,315**	**$2,400**	**$4,664**

Operating Experience

The following table identifies the feeders selected for upgrading in 2004 and indicates the number of customers affected, and the average unscheduled yearly interruption statistics for the five-year period ending December 31, 2002. The SAIFI and SAIDI statistics exclude planned power interruptions and interruptions due to loss of supply from Hydro. See Volume III, Distribution, Appendix 3, Attachment A for an analysis of WES-02 and Appendix 3, Attachment B for an analysis of BRB-04 and Appendix 3, Attachment C for an analysis of PUL-01 and PUL-02.

Feeder	Number of Customers	SAIFI[1] Interruptions Per Year	SAIDI[2] Hours Per Year
Lumsden/Cape Freels (WES-02)	766	3.7	6.3
Bay Roberts/Port Au Grave (BRB-04)	1,013	1.5	5.5
Torbay (PUL-01)	1,935	1.8	3.8
Flatrock/Pouch Cove (PUL-02)	1,427	2.8	5.0
Company Average		1.8	2.9

Notes:

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

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

The following table shows the expenditures for this project for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$2,870	$1,776	$3,422	$1,092	$1,247

Project Justification

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

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

The total WES-02 project is estimated at $1,099,000, of which $699,000 will be expended in 2004, and will require approximately $400,000 in 2005 to complete that item.

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

Future Commitments

None.

Project Title: **Feeder Additions and Upgrades to Accommodate Growth**

Location: **Chamberlains, Glendale and Springfield**

Classification: **Distribution**

Project Cost: **$677,000**

Project Description

This project consists of the construction of a new feeder, equipment or conductor upgrades on existing feeders and/or installation of sections of feeders to accommodate energy sales growth.

The work for 2004 includes the construction of a new feeder at Chamberlains, reconductoring a section of Glendale-01 feeder and the installation of voltage regulators on Springfield-01 feeder.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$216	-	-	-
Labour – Internal	204	-	-	-
Labour – Contract	213	-	-	-
Engineering	25	-	-	-
Other	19	-	-	-
Total	**$677**	**$230**	**$700**	**$1,607**

Operating Experience

Forecast and actual peak load conditions and customer growth indicate that these projects are warranted in order to maintain the electrical system within recommended guidelines. See Volume III, Distribution, Appendix 4 for more details.

The following table shows the expenditures for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$37	$262	$0	$0	$0

Project Justification

This project is required to maintain substation transformer loading, voltage regulation and/or customer loading density within recommended guidelines.

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

Future Commitments

None.

Project Title: **Switch Replacement and Upgrade Underground Distribution Water St., St. John's**

Location: **St. John's**

Classification: **Distribution**

Project Cost: **$750,000**

Project Description

This project is the completion of a project started in 2000. It involves the replacement and upgrade of high voltage oil-filled switches, platform-mounted transformers and high voltage distribution vaults that form part of the Water Street underground distribution system. The project will require the installation of pad-mount switches and pad-mount transformers, as well as the establishment of loop feeds for sections of the underground distribution system at various locations along Water Street, St. John's.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$361	-	-	$361
Labour – Internal	288	-	-	288
Labour – Contract	90	-	-	90
Engineering	9	-	-	9
Other	2	-	-	2
Total	**$750**	**$0**	**$0**	**$750**

Operating Experience

Commercial properties in the Water Street area of the downtown core of St. John's are served by an underground distribution system installed in the mid-1960s. The plant and equipment that form this system have reached the end of their expected lives. In addition, the underground switches that permit sectionalizing and isolation of various portions of this system are a recognized safety hazard and are no longer supported by the manufacturer. There are several locations where 30-year-old aerial transformer bank structures are located next to buildings resulting in safety clearance problems for workers maintaining these buildings. There are also a number of high voltage electrical vaults that require attention to barricade bare conductors and equipment to protect persons entering these locations.

In 2000, a program of replacement or elimination of the thirteen underground switches was initated. To the end of 2002, seven of these switches had been replaced or eliminated. An additional 5 switches will be replaced or eliminated as part of the 2003 capital project. In 2004, the last remaining oil-filled switch (in manhole #6) will be replaced and upgrading of 6 underground vaults will be completed to address safety concerns.

The following table shows the expenditures for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$0	$77	$279	$469	$765

Project Justification

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

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

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

Future Commitments

None.

Project Title: **Interest During Construction**

Location: **N/A**

Classification: **Distribution**

Project Cost: **$100,000**

Project Description

This is an estimate of the interest during construction that will be charged on distribution work orders with an estimated expenditure of less than $50,000 and a construction period in excess of three months.

Operating Experience

This calculation is based on an estimated monthly average of total distribution work in progress of $1.0 million. The interest rate which is applied each month is dependent on the source of funds to finance the capital expenditure and is calculated in accordance with Order No. P.U. 37 (1981).

The following table shows the expenditures for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$93	$83	$78	$80	$100

Project Justification

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

Future Commitments

None.

GENERAL PROPERTY

Project Title: **Tools & Equipment**

Location: **Company offices, service buildings and vehicles**

Classification: **General Property**

Project Cost: **$535,000**

Project Description

This project is 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. Details of equipment to be acquired in 2004 are contained in Volume III, General Property, Appendix 1.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$535	-	-	-
Labour – Internal	-	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	-	-	-	-
Total	**$535**	**$518**	**$1,125**	**$2,178**

Operating Experience

The following table gives the expenditures for the past five years for this project.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$798	$427	$537	$378	$827

Project Justification

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

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

Future Commitments

None.

Project Title: **Real Property**

Location: **Electrical Maintenance Facility, Salt Pond Service Building, Corner Brook Service Building, Gander Office and Stephenville Office**

Classification: **General Property**

Project Cost: **$174,000**

Project Description

This project is the addition to, or renovation of, Company buildings and property that are not part of the electrical supply to customers. Details of work associated with each location noted above are contained in Volume III, General Property, Appendix 2.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$169	-	-	-
Labour – Internal	2	-	-	-
Labour – Contract	-	-	-	-
Engineering	3	-	-	-
Other	-	-	-	-
Total	**$174**	**$662**	**$1,848**	**$2,684**

Operating Experience

The following table gives the expenditures for the past five years for this project.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$1,500	$503	$407	$337	$220

Project Justification

The project is necessary to maintain buildings and support facilities and to operate them in an efficient manner

Future Commitments

None.

TRANSPORTATION

Project Title: **Purchase Vehicles and Aerial Devices**

Location: **Various**

Classification: **Transportation**

Project Cost: **$3,487,000**

Project Description

This project involves the necessary replacement of passenger vehicles and aerial devices (line trucks). The Company has determined that the units to be replaced have reached the end of their useful lives.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$3,433	-	-	-
Labour – Internal	45	-	-	-
Labour – Contract		-	-	-
Engineering	9	-	-	-
Other		-	-	-
Total	**$3,487**	**$2,831**	**$7,045**	**$13,363**

The following table lists units to be acquired in 2004.

Category	No. of Units
Passenger/off-road vehicles [1]	15
Heavy fleet vehicles [2]	12
Off –road vehicles [3]	9
Total	**36**

Notes:

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

Operating Experience

Volume III, Transportation, Appendix 1 provides information with respect to age, odometer reading and maintenance cost for each vehicle selected for replacement.

The following table gives the expenditures for the past five years for this project.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$1,797	$2,276	$2,061	$1,609	$3,076

Project Justification

The company has a guideline that initiates the replacement of vehicles. For passenger vehicles the guideline is age of five years or 150,000 kilometers. For heavy fleet vehicles the guideline is age of 10 years or 250,000 kilometers.

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.

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

Future Commitments

None.

TELECOMMUNICATIONS

Project Title: **Replace/Upgrade Communication Equipment**

Location: **Various**

Classification: **Telecommunications**

Project Cost: **$70,000**

Project Description

This project involves the replacement and/or upgrade of equipment identified during inspections or during day to day operations.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$59	-	-	-
Labour – Internal	7	-	-	-
Labour – Contract	-	-	-	-
Engineering	4	-	-	-
Other	-	-	-	-
Total	**$70**	**$70**	**$281**	**$421**

Operating Experience

Older vintage radio equipment and towers are susceptible to breakdown and other deficiencies. Where practical, equipment is repaired and deficiencies rectified, however, where it is not feasible to repair the equipment or correct the deficiencies, new units are acquired.

The following table gives the expenditures for the past five years for this project.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$113	$125	$94	$105	$205

Project Justification

Newfoundland Power engages an engineering consultant to inspect radio towers. Deficiencies identified through these inspections are addressed through this project. The Company has

approximately 340 mobile radios in service. Each year approximately 20 units that show a high frequency of breakdown and repair are identified and replaced with more reliable units. The Company will ensure this project is completed at the lowest possible cost consistent with reliable service.

Future Commitments

None.

Project Title: **Substation Telephone Circuit Protection**

Location: **Deer Lake, Riverhead, Tors Cove, Salt Pond and Trepassey**

Classification: **Telecommunications**

Project Cost: **$50,000**

Project Description

This project involves upgrades to teleline isolation installations at Deer Lake, Riverhead, Tors Cove, Salt Pond and Trepassey substations.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$18	-	-	-
Labour – Internal	17	-	-	-
Labour – Contract	-	-	-	-
Engineering	15	-	-	-
Other	-	-	-	-
Total	**$50**	**$90**	**$297**	**$437**

Operating Experience

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

The following table gives the expenditures for the past five years for this project.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$167	$208	$25	$0	$89

Project Justification

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

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

Future Commitments

None.

INFORMATION SYSTEMS

Project Title: **Application Enhancements**

Location: **All Service Areas**

Classification: **Information Systems**

Project Cost: **$1,355,000**

Project Description

The Company has software applications that are custom developed, such as the Customer Service System ("CSS"), and others that are vendor provided such as Microsoft Great Plains. This project is necessary to enhance these software applications to support changing business requirements and to take advantage of new development and product improvements. For details, see Volume IV, Information Systems, Appendix 1.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$ 23	-	-	-
Labour – Internal	735	-	-	-
Labour – Contract		-	-	-
Engineering		-	-	-
Other	597	-	-	-
Total	**$1,355**	**$1,390**	**$3,400**	**$6,145**

Operating Experience

The project cost is based on an assessment of historical expenditures. For comparison purposes, the following table gives the expenditures for this project for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$555	$906	$619	$726	$836

Project Justification

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

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

Future Commitments

None.

Project Title: **Application Environment**

Location: **All Service Areas**

Classification: **Information Systems**

Project Cost: **$791,000**

Project Description

This project involves the necessary upgrading of technology products and related processes required to support the implementation, upgrading, and enhancement of the Company's computer applications. It includes upgrades to current software tools, processes and applications as well as the acquisition of new software licences. For details see Volume IV, Information Systems, Appendix 2.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$270	-	-	-
Labour – Internal	346	-	-	-
Labour – Contract		-	-	-
Engineering		-	-	-
Other	175	-	-	-
Total	**$791**	**$410**	**$2,620**	**$3,821**

Operating Experience

The project cost is based on an assessment of historical expenditures. For comparison purposes, the following table gives the expenditures for this project for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$1,724	$587	$560	$724	$846

Project Justification

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

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

Future Commitments

None.

Project Title: **Customer Systems Replacement**

Location: **All Service Areas**

Classification: **Information Systems**

Project Cost: **$226,000**

Project Description

This project involves customer service and efficiency enhancements to the Customer Service System which also will reduce reliance on the OpenVMS operating system. This includes improvements to the customer bill formatting and printing procedure which currently is a difficult and costly process. For details see Volume IV, Information Systems, Appendix 3.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$15	-	-	-
Labour – Internal	166	-	-	-
Labour – Contract		-	-	-
Engineering		-	-	-
Other	45	-	-	-
Total	**$226**	**$250**	**$520**	**$996**

Operating Experience

The following table gives the expenditures for this project for the past year.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$0	$0	$0	$0	$170

Project Justification

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

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

Future Commitments

None.

Project Title: **Network Infrastructure**

Location: **All Service Areas**

Classification: **Information Systems**

Project Cost: **$393,000**

Project Description

This is the second year of a two-year project involving the replacement of aging network components that no longer support the business needs of the Company or are no longer supported by the vendor. For details see Volume IV, Information Systems, Appendix 4.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$341	-	-	-
Labour – Internal	36	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	16	-	-	-
Total	**$393**	**$250**	**$150**	**$793**

Operating Experience
The project cost is based on an assessment of historical expenditures. For comparison purposes, the following table gives the expenditures for this project for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$237	$205	$0	$0	$547

Project Justification

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

A stable and effective network is critical to ensuring the availability of the Company's business applications to enable employees to be more responsive to customers. The network components

being replaced connect the Company's offices across the province to the St. John's offices and is used by employees to access applications like the Customer Service System, Problem Call Logging System, Safety applications, engineering design applications, email, Business Support Systems, Intranet, etc. The new network components will provide the additional network capacity and performance required for the delivery of these business applications. As well, it will reduce the Company's reliance on technology that is no longer manufactured.

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

Future Commitments

None.

Project Title: **Personal Computer Infrastructure**

Location: **All Service Areas**

Classification: **Information Systems**

Project Cost: **$539,000**

Project Description

This project is necessary for the replacement or upgrade of personal computers, printers and associated assets that have reached the end of their useful life. The Company currently has an expectation of a four to five year life cycle for personal computers. In 2004 109 PCs will be replaced (74 desktop computers and 35 laptop computers). This project also covers the purchase of 4 printers to replace existing printers that have reached the end of their useful life and additional peripheral equipment such as monitors.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$368	-	-	-
Labour – Internal	72	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	99	-	-	-
Total	**$539**	**$550**	**$1,655**	**$2,744**

Operating Experience

The project cost is based on an assessment of historical expenditures. For comparison purposes, the following table gives the expenditures for this project for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$1,242	$784	$405	$635	$564

Project Justification

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

The Company annually reviews its personal computing requirements in detail as a part of its capital budgeting process to ensure that each employee has the computing power necessary to perform their job effectively. The objective of this project is to accommodate application enhancements and new applications while maintaining current performance standards and customer service levels. As well, the replacement of personal computer infrastructure and the reassignment of older, less powerful personal computers to users with lesser capacity requirements will extend the useful life of personal computers.

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

Future Commitments

None.

Project Title: **Shared Server Infrastructure**

Location: **All Service Areas**

Classification: **Information Systems**

Project Cost: **$644,000**

Project Description

The Shared Server Infrastructure project includes the procurement, implementation, and management of the hardware and software relating to the operation of shared servers. Shared servers are computers that support applications used by multiple employees. Management of these shared servers, and their components, is critical to ensuring that these applications operate effectively at all times.

This project is necessary to maintain current performance on the Company's shared servers and to provide the additional infrastructure needed to accommodate new and existing applications. This involves the replacement and upgrade of disks, processors, and memory, as well as security and monitoring software. For details see Volume IV, Information Systems, Appendix 5.

Project Cost (000s)				
Cost Category	**2004**	**2005**	**2006 - 2008**	**Total**
Material	$414	-	-	-
Labour – Internal	145	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	85	-	-	-
Total	**$644**	**$900**	**$2,350**	**$3894**

Operating Experience

The project cost is based on an assessment of historical expenditures. For comparison purposes, the following table gives the expenditures for this project for the past five years.

Project Cost					
Year	**1999**	**2000**	**2001**	**2002**	**2003F**
($000s)	$160	$286	$625	$705	$1,561

Project Justification

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

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

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

Future Commitments

None.

UNFORESEEN ITEMS

Project Title: **Allowance for Unforeseen Items**

Location: **Various**

Classification: **Unforeseen Items**

Project Cost: **$750,000**

Project Description

This allowance is necessary to cover any unforeseen capital expenditures which have not been budgeted elsewhere. The purpose of the account is to permit the Company to act expeditiously to deal with events affecting the electrical system in advance of seeking specific approval of the Board. Examples of such expenditures are the replacement of facilities and equipment due to major storm damages or equipment failure.

Operating Experience

This project provides funds for timely service restoration.

Project Justification

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

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

Future Commitment

None.

Newfoundland Power Inc.
2004 Capital Budget
Estimate of Future Required Expenditures on
2004 Projects
(000s)

Budget Class and Project	**2004**	**2005**
Distribution		
Aliant Pole Purchase	$4,044	$4,044

Newfoundland Power Inc.
2004 Capital Budget

2002 Rate Base
(000s)

	2001	**2002**
Plant Investment	$971,294	$1,005,674
Deduct:		
Accumulated Depreciation	408,167	420,736
Contributions in Aid of Construction	19,986	19,788
Deferred Income Taxes	-	-
Weather Normalization Reserve	(9,900)	(10,919)
	418,253	429,605
	553,041	576,069
Add – Contributions Country Homes	545	570
Balance – Current Year	553,586	576,639
Balance – Previous Year	520,475	553,586
Average	537,031	565,113
Cash Working Capital Allowance	4,561	4,712
Materials and Supplies	3,570	3,512
Average Rate Base at Year End	545,162[1]	573,337

[1] Approved per Order No. P.U. 36 (2002-2003).

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

IN THE MATTER OF capital expenditures and rate base of Newfoundland Power Inc.; and

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

(a) approving its 2004 Capital Budget of $53,909,000; and
(b) fixing and determining its average rate base for 2002 in the amount of $573,337,000.

2003 Capital Expenditure Status Report

NEWFOUNDLAND POWER
A FORTIS COMPANY

NEWFOUNDLAND POWER INC.

2004 CAPITAL BUDGET APPLICATION

2003 Capital Expenditure Status Report

Explanatory Note

This report is presented in compliance with the directive of the Board of Commissioners of Public Utilities contained in paragraph 6 of Order No. P.U. 36 (2002-2003).

Variances of more than 10% of approved expenditure or $50,000 or greater are explained in the Notes contained in Appendix A, which immediately follows the blue page at the conclusion of the 2003 Capital Expenditure Status Report.

Newfoundland Power Inc.
2004 Capital Budget

2003 Capital Budget Variances
(000s)

	Approved by Order Nos. P.U. 36 (2002-2003), P.U. 19 (2003)	Forecast	Variance
Energy Supply	$7,076	$7,429[1]	353
Substations	5,887	5,820[3]	(67)[3]
Transmission	4,129	4,291[2]	162
Distribution	26,132	27,614[3]	1,482[3]
General Property	910	1,047	137
Transportation	2,141	2,328	187
Telecommunications	383	294	(89)
Information Systems	5,507	5,728	221
General Expenses Capital	2,800	2,800	0
Unforeseen	750	375	(375)
Total	55,715	57,726	2,011
Projects carried forward from 2002	-	5,528	

1. Includes capital expenditures of $19,000 incurred in 2002.
2. Includes capital expenditures of $50,000 incurred in 2002.
3. On June 27, 2003, Newfoundland Power submitted a Supplementary Application to the Board seeking approval of a project in the amount of $721,000, which affects the substations and distribution categories. The amounts of $271,000 allocated to Substations and $450,000 allocated to Distribution are contained in the Forecast column with corresponding amounts in the Variance column.

2003 Capital Expenditure Status Report
(000s)

	Capital Budget 2003	Actual Expenditures 2002	Actual Expenditures YTD 2003	Actual Expenditures Total To Date	Forecast Remainder of 2003	Forecast Total 2003	Overall Total	Variance
2003 Capital Projects	$ 52,915	$ 69	$ 19,404	$ 19,923	$ 35,003	$ 54,140	54,926	$ 2,011
2003 General Expenses Capital	2,800	-	1,408	1,408	1,392	2,800	2,800	$ -
Grand Total	$ 55,715	$ 69	$ 20,812	$ 21,331	$ 36,395	$ 56,940	$ 57,726	$ 2,011

2002 Capital Expenditure Carryover Report
(000s)

	Capital Budget 2002	Capital Budget 2003	Actual Expenditures 2002	Actual Expenditures YTD 2003	Actual Expenditures Total To Date	Forecast Remainder of 2003	Forecast Total 2003	Forecast Overall Total	Variance
2002 Projects Carried into 2003	15,046		11,007	1,388	12,395	4,140	5,528	16,535	1,489
Grand Total	$ 15,046	$ -	$ 11,007	$ 1,388	$ 12,395	$ 4,140	$ 5,528	$ 16,535	$ 1,489

2003 Capital Expenditure Status Report
(000s)

Class: Energy Supply

Project	Capital Budget 2002	Capital Budget 2003	Total	Actual Expenditures 2002	Actual Expenditures YTD 2003	Actual Expenditures Total To Date	Forecast Remainder of 2003	Forecast Total 2003	Forecast Overall Total	Variance	Notes*
Hydro Plants - Facility Rehabilitation	$ -	$ 2,345	$ 2,345	$ -	$ 222	$ 222	$ 2,158	$ 2,380	$ 2,380	$ 35	
Thermal Plants - Facility Rehabilitation	-	1,561	1,561	14	72	86	1,687	1,759	1,773	212	1
Purchase Portable Diesel Generation	-	1,500	1,500	-	17	17	1,583	1,600	1,600	100	2
Penstock Replacement - Lockston	-	1,520	1,520	5	33	38	1,488	1,521	1,526	6	
Major Electrical Equipment Repairs	-	150	150	-	3	3	147	150	150	-	
	-	7,076	7,076	19	347	366	7,063	7,410	7,429	353	
Carry Overs											
Wesleyville Gas Turbine Replacement	$ 1,674		$ 1,674	$ 1,356	$ 53	$ 1,409	$ 675	$ 728	$ 2,084	$ 410	3
Hydro Plants - Facility Rehabilitation	1,771		1,771	2,031	336	2,367	62	398	2,429	658	4
Thermal Plants - Facility Rehabilitation	828		828	656	95	751	309	404	1,060	232	5
System Control Centre - Extend SCADA Capabilities	-		-	29	35	64	40	75	104	104	6
Gas Turbine - Replace Governor and Control Logic	500		500	317	80	397	80	160	477	(23)	
	4,773		4,773	4,389	599	4,988	1,166	1,765	6,154	1,381	
Total	$ 4,773	$ 7,076	$ 11,849	$ 4,408	$ 946	$ 5,354	$ 8,229	$ 9,175	$ 13,583	$ 1,734	

* See Appendix A for notes containing variance explanations.

2003 Capital Expenditure Status Report
(000s)

Class: Substations

Project	Capital Budget 2002	Capital Budget 2003	Total	Actual Expenditures 2002	Actual Expenditures YTD 2003	Actual Expenditures Total To Date	Forecast Remainder of 2003	Forecast Total 2003	Forecast Overall Total	Variance	Notes*
Rebuild Substations	$ -	$ 557	$ 557	$ -	$ 73	$ 73	$ 379	$ 452	$ 452	$ (105)	7
Replacement and Spare Substation Equipment	-	1,107	1,107	-	220	220	850	1,070	1,070	(37)	
Reliability and Power Quality Improvements	-	198	198	-	9	9	109	118	118	(80)	8
Substation Protection and Monitoring Improvements	-	425	425	-	44	44	386	430	430	5	
Distribution System - Feeder Remote Control	-	1,200	1,200	-	540	540	660	1,200	1,200	-	
Virginia Waters - Add 66/12.5kV Transformer	-	1,150	1,150	-	32	32	1,016	1,048	1,048	(102)	9
Chamberlains - Add 66/25 kV Transformer		1,250	1,250		53	53	1,182	1,235	1,235	(15)	
Customer Growth - Cow Head		-	-		9	9	258	267	267	267	10
	-	5,887	5,887	-	980	980	4,840	5,820	5,820	(67)	
Carry Overs											
Purchase Power Transformer	$ 2,000		$ 2,000	48	95	143	1,610	1,705	1,753	(247)	11
St. John's Area Transmission Relaying Improvement Program	593		593	513	130	643	144	274	787	194	12
Modifications to Accommodate Gas Turbine	480		480	719	49	768	56	105	824	344	13
Replacement and Spare Substation Equipment	2,475		2,475	2,716	100	2,816	36	136	2,852	377	14
	5,548		5,548	3,996	374	4,370	1,846	2,220	6,216	668	
Total	$ 5,548	$ 5,887	$ 11,435	$ 3,996	$ 1,354	$ 5,350	$ 6,686	$ 8,040	$ 12,036	$ 601	

* See Appendix A for notes containing variance explanations.

2003 Capital Expenditure Status Report
(000s)

Class: Transmission

Project	Capital Budget 2003	Actual Expenditures 2002	Actual Expenditures YTD 2003	Actual Expenditures Total To Date	Forecast Remainder of 2003	Forecast Total 2003	Forecast Overall Total	Variance	Notes*
Rebuild Transmission Lines	$ 4,129	$ 50	$ 1,415	$ 1,465	$ 2,826	$ 4,241	$ 4,291	$ 162	15
		-		-	-		-	-	
Total	$ 4,129	$ 50	$ 1,415	$ 1,465	$ 2,826	$ 4,241	$ 4,291	$ 162	

* See Appendix A for notes containing variance explanations.

2003 Capital Expenditure Status Report
(000s)

Class: Distribution

Project	Capital Budget 2003	Actual Expenditures 2002	Actual Expenditures YTD 2003	Actual Expenditures Total To Date	Forecast Remainder of 2003	Forecast Total 2003	Forecast Overall Total	Variance	Notes*
Extensions	$ 4,322	$ -	$ 2,509	$ 2,509	$ 2,225	$ 4,734	$ 4,734	$ 412	16
Meters	674	-	280	280	394	674	674	-	
Services	1,819	-	635	635	1,206	1,841	1,841	22	
Street Lighting	952	-	442	442	791	1,233	1,233	281	17
Transformers	4,975	-	2,710	2,710	2,185	4,895	4,895	(80)	18
Reconstruction	2,745	-	1,328	1,328	1,417	2,745	2,745	-	
Aliant Pole Purchase	4,044	-	4,044	4,044	-	4,044	4,044	-	
Load Research	425		3	3	422	425	425		
Trunk Feeders									
Rebuild Distribution Lines	3,504	-	1,270	1,270	2,179	3,449	3,449	(55)	19
Relocate/Replace Distribution Lines For Third Parties	275	-	74	74	219	293	293	18	
Distribution Reliability Initiative	1,078	-	238	238	1,009	1,247	1,247	169	20
Improve Distribution System Protection/Operation	457	-	300	300	419	719	719	262	21
Replace Underground Switches - Water Street, St. John's	762	-	124	124	641	765	765	3	
Extensions-Cow Head	-	-	450	450	-	450	450	450	22
Interest During Construction	100	-	24	24	76	100	100	-	
Total	$ 26,132	$ -	$ 14,431	$ 14,431	$ 13,183	$ 27,614	$ 27,614	$ 1,482	

* See Appendix A for notes containing variance explanations.

2003 Capital Expenditure Status Report
(000s)

Class: General Property

Project	Capital Budget 2003	Actual Expenditures 2002	Actual Expenditures YTD 2003	Actual Expenditures Total To Date	Forecast Remainder of 2003	Forecast Total 2003	Forecast Overall Total	Variance	Notes*
Tools and Equipment	$ 770	$ -	$ 364	$ 364	$ 463	$ 827	$ 827	$ 57	23
Additions to Real Property	140	-	115	115	105	220	220	80	24
Total	$ 910	$ -	$ 479	$ 479	$ 568	$ 1,047	$ 1,047	$ 137	

* See Appendix A for notes containing variance explanations.

2003 Capital Expenditure Status Report
(000s)

Class: Transportation

Project	Capital Budget 2002	Capital Budget 2003	Total	Actual Expenditures 2002	Actual Expenditures YTD 2003	Actual Expenditures Total To Date	Forecast Remainder of 2003	Forecast Total 2003	Forecast Overall Total	Variance	Notes*
Purchase of Vehicles and Aerial Devices		$ 2,141	$ 2,141	$ -	$ 523	$ 523	$ 1,805	$ 2,328	$ 2,328	$ 187	25
Carry Overs											
Purchase of Vehicles and Aerial Devices	$ 2,200		2,200	1,609	-	$ 1,609	748	748	$ 2,357	157	26
Total	$ 2,200	$ 2,141	$ 4,341	$ 1,609	$ 523	$ 2,132	$ 2,553	$ 3,076	$ 4,685	$ 344	

* See Appendix A for notes containing variance explanations.

2003 Capital Expenditure Status Report
(000s)

Class: Telecommunications

Project	Capital Budget 2002	Capital Budget 2003	Total	Actual Expenditures 2002	Actual Expenditures YTD 2003	Actual Expenditures Total To Date	Forecast Remainder of 2003	Forecast Total 2003	Forecast Overall Total	Variance	Notes*
Replace/Upgrade Communications Equipment	$ -	$ 242	$ 242	$ -	$ -	$ -	$ 205	$ 205	$ 205	$ (37)	27
Substation Telephone Circuit Protection	-	141	141	-	3	3	86	89	89	(52)	28
	-	383	383	-	3	3	291	294	294	(89)	
Carry Overs											
Fibre Optic Networking	$ 264		264	115	139	254	(15)	124	239	(25)	
Total	$ 264	$ 383	$ 647	$ 115	$ 142	$ 257	$ 276	$ 418	$ 533	$ (114)	

* See Appendix A for notes containing variance explanations.

2003 Capital Expenditure Status Report
(000s)

Class: Information Systems

Project	Capital Budget 2002	Capital Budget 2003	Total	Actual Expenditures 2002	Actual Expenditures YTD 2003	Actual Expenditures Total To Date	Forecast Remainder of 2003	Forecast Total 2003	Forecast Overall Total	Variance	Notes*
Application Enhancements	$ -	$ 766	$ 766	$ -	$ 413	$ 413	$ 423	$ 836	$ 836	$ 70	29
Application Environment	-	755	755		84	84	762	846	846	91	30
Customer Service System Study		170	170		69	69	101	170	170		
Facilities Management	-	562	562		298	298	255	553	553	(9)	
Network Infrastructure		542	542		16	16	531	547	547	5	
Operations Support Systems	-	383	383		130	130	241	371	371	(12)	
Outage Management	-	284	284	-	7	7	273	280	280	(4)	
Personal Computer Infastructure		634	634	-	69	69	495	564	564	(70)	31
Shared Servers Infastructure		1,411	1,411	-	590	590	971	1,561	1,561	150	32
		5,507	5,507	-	1,676	1,676	4,052	5,728	5,728	221	
Carry Overs											
Operations Support Systems	$ 1,322		$ 1,322	459	61	520	245	306	765	(557)	33
Facilities Management	939		939	439	215	654	150	365	804	(135)	34
	2,261	-	2,261	898	276	1,174	395	671	1,569	(692)	
Total	$ 2,261	$ 5,507	$ 7,768	$ 898	$ 1,952	$ 2,850	$ 4,447	$ 6,399	$ 7,297	$ (471)	

* See Appendix A for notes containing variance explanations.

2003 Capital Expenditure Status Report
(000s)

Class: Unforeseen Items

Project	Capital Budget 2003	Actual Expenditures 2002	Actual Expenditures YTD 2003	Actual Expenditures Total To Date	Forecast Remainder of 2003	Forecast Total 2003	Forecast Overall Total	Variance	Notes*
Allowance for Unforseen Items	$ 750	$ -	$ -	$ -	$ 375	$ 375	$ 375	$ (375)	35
		-		-	-		-	-	
Total	$ 750	$ -	$ -	$ -	$ 375	$ 375	$ 375	$ (375)	

* See Appendix A for notes containing variance explanations.

2003 Capital Expenditure Status Report
Notes

Energy Supply

1. *Thermal Plants - Facility Rehabilitation:*
   Budget: $1,561,000 Forecast: $1,773,000 Variance: $212,000

   The original project for the mobile gas turbine at Port aux Basques involved refurbishment of the protection, controls and housing. However, further analysis identified the need to expand the project to include refurbishment of the gas generator ($325,000). This was somewhat offset by a lower than expected contract price for the installation of an exhaust stack at the Greenhill gas turbine (-$123,000).

2. *Purchase Portable Diesel Generation:*
   Budget: $1,500,000 Forecast: $1,600,000 Variance: $100,000

   Contract prices received following the tender call were higher than had been anticipated ($100,000).

3. *Wesleyville Gas Turbine Relocation (2002 Project):*
   Budget: $1,674,000 Forecast: $2,084,000 Variance: $410,000

   The increase in this project is the result of two items. First, as a result of the discussions with the manufacturer and other engineering firms, it was determined that certain original, 30 year old, items would be compromised during relocation and should be replaced ($120,000); second, additional interest was incurred during construction ($96,000); and third, additional engineering, project management and commissioning costs were incurred ($150,000) mainly as a result of deferring the relocation from 2002 to 2003.

4. *Hydro Plants – Facility Rehabilitation (2002 Project):*
   Budget: $1,771,000 Forecast: $2,429,000 Variance: $658,000

   The increase in this category is the result of the Company's decision to replace the governor and the control system for both generating units at the Seal Cove Hydroelectric plant rather than only one unit as planned in the original budget. This decision was made when an equipment failure in the second unit in March of 2002 caused significant damage to the generator. Due to the fact that it was necessary to rebuild the second generator, it was determined to be prudent to also replace the governor and the control system at the same time. The increase in costs for the Seal Cove project were somewhat offset by the deferral until 2003 of similar work at Tors Cove and Topsail Hydroelectric plants.

2003 Capital Expenditure Status Report
Notes

Energy Supply

5. *Thermal Plants – Facility Relocation (2002 Project):*
   Budget: $828,000 Forecast: $1,060,000 Variance: $232,000

   The increase in this project is a result of increase costs associated with the Greenhill Gas Turbine upgrade ($129,000) and the Salt Pond Gas Turbine air intake replacement ($60,000).

   During the implementation of the upgrades at the Greenhill Gas Turbine, problems were experienced with the vibration monitoring system. The system was obsolete and replacement parts unavailable, resulting in a requirement to replace the whole system.

   The original plan for the replacement of the Salt Pond air intake structure anticipated that the inlet plenum would be reused. However, on further inspection by a third party consultant, it will be determined that, due to age and deterioration, the structural integrity would be compromised during relocation and should be replaced.

6. *Web Enterprise Upgrade SCADA (2001 Project):*
   Budget: $0 Forecast: $104,000 Variance: $104,000

   This project was a carryover from the 2001 budget and is designed to provide web-based access to screens and telemetry available through SCADA. It will be completed in 2003.

2003 Capital Expenditure Status Report
Notes

Substations

7. *Rebuild Substations:*
   Budget: $557,000 Forecast: $452,000 Variance: -$105,000

   An engineering analysis of projects to upgrade substations at Grand Beach and Trepassey revealed that the work required was in excess of the original estimate. As a result, both of these projects were scaled back such that $35,000 will be spent to complete engineering and drafting this year (-$87,000). In addition, planned work to extend safety clearances around certain regulators was deferred pending further engineering analysis (-$36,000). These reductions were somewhat offset by the unplanned replacement of a breaker at Laurentian substation following an equipment failure ($18,000).

8. *Reliability and Power Quality Improvements:*
   Budget: $198,000 Forecast: $118,000 Variance: -$80,000

   The transmission line switch program on 39L was reduced to include engineering only in order to release resources for other higher priority projects (-$82,000). This will be carried forward into 2004.

9. *Virginia Waters – Add 66/12.5kv Transformer:*
   Budget: $1,150,000 Forecast: $1,048,000 Variance: -$102,000

   The contract prices received following the tender call were lower than had been anticipated (-$102,000).

10. *Customer Growth – Cow Head*
    Budget: $0 Forecast: $267,000 Variance: $267,000

    This is a customer driven project that was not anticipated when the 2003 Capital Budget was prepared.

11. *Purchase Power Transformer (2002 Project):*
    Budget: $2,000,000 Forecast: $1,753,000 Variance: -$247,000

    The contract prices received following the tender call were lower than had been anticipated (-$247,000).

2003 Capital Expenditure Status Report
Notes

Substations

12. *St. John's Area & Transmission Relaying Improvement Program (2002 Project):*
Budget: $593,000 Forecast: $787,000 Variance: $194,000

Due to the complexity and communication incompatibility of some of the hardware components, identified during the implementation phase of the project, additional communications interface devices were required ($194,000).

13. *Modification to Accommodate Gas Turbine (2002 Project):*
Budget: $480,000 Forecast: $824,000 Variance: $344,000

The variance in this project reflects the cost of an additional high voltage breaker, the construction of a steel structure, the relocation of a transformer and the addition of a battery bank and charging system ($344,000). These items were added to meet substation standards.

14. *Replacement and Spare Substation Equipment (2002 Project):*
Budget: $2,475,000 Forecast: $2,852,000 Variance: $377,000

The increase in this category is primarily attributable to the repair of the 1966-vintage T1 transformer at Grand Bay Substation, which failed in December 2001 ($207,000), the unplanned replacement of voltage regulator panels that failed during 2002 ($50,000), and increased costs to repair portable substation P-435, ($25,000).

2003 Capital Expenditure Status Report
Notes

Transmission

15. Rebuild Transmission Lines:
Budget: $4,129,000 Forecast: $4,291,000 Variance: $162,000

The variance is the result of high priority projects identified during the 2003 transmission line inspections ($100,000), along with increased survey costs on 100L, 124L and 146L ($59,000).

2003 Capital Expenditure Status Report
Notes

Distribution

16. Extensions:
Budget: $4,322,000 Forecast: $4,734,000 Variance: $412,000

The extensions forecast is being affected by a customer driven project to deliver power to the Pitcher's Pond Golf Course ($75,000), along with the takeover of the Argentia distribution system from the Argentia Management Authority ($190,000). In addition, residential customer growth remains stronger than expected ($147,000).

17. Street Lighting:
Budget: $952,000 Forecast: $1,233,000 Variance: $281,000

Installation of new streetlights in St. John's Region has increased significantly as a result of customer driven demand ($231,000). In addition, a greater than expected number of streetlights have had to be replaced ($50,000).

18. Transformers:
Budget: $4,975,000 Forecast: $4,895,000 Variance: -$80,000

The reduction in this forecast reflects a reduced requirement for transformers (-$80,000).

19. Rebuild Distribution Lines:
Budget: $3,504,000 Forecast: $3,449,000 Variance -$55,000

The variance in this item is the result of additional work on the SPR-03 project, offset by the deferral of the GLV-02 Extend Line to Charlottetown project. The GLV-02 project will be carried forward into 2004.

20. Distribution Reliability Initiative:
Budget: $1,078,000 Forecast: $1,247,000 Variance: $169,000

The project to improve feeder GLV-02 in the Terra Nova National Park area was increased to accommodate the route approved by Parks Canada ($195,000). This was somewhat offset by a reduction in MIL-02 based on a lower than expected contract price for pole replacement (-$26,000).

2003 Capital Expenditure Status Report
Notes

Distribution

21. *Improve Distribution System Protection/Operation:*
Budget: $457,000 Forecast: $719,000 Variance: $262,000

The original budget was prepared based on historical expenditures. In 2002 we moved towards a more structured approach to carrying out work based on the feeder inspection program. The inspections not only identify defects but also identify various "program" requirements such as CLF requirements, Lightning arrestor requirements, etc. The revised forecast for Distribution System Protection reflects the decision to complete all required "protection" work identified on the feeders that were inspected in 2002.

22. *Extension – Cow Head:*
Budget: $0 Forecast: $450,000 Variance: $450,000

This is a customer driven project that was not anticipated when the 2003 Capital Budget was prepared.

2003 Capital Expenditure Status Report
Notes

General Property

23. Tools and Equipment:
Budget: $770,000 Forecast: $827,000 Variance: $57,000

This variance is the result of increased costs to replace workstations and upgrade furniture at the Kenmount Road Building ($23,000) and Gander Office ($6,000), along with a higher than expected cost for the purchase of a tension stringer ($38,000).

24. Additions to Real Property:
Budget: $140,000 Forecast: $220,000 Variance: $80,000

This variance is the result of required building renovations at the Kenmount Road Building ($48,000) and the Gander Office ($21,000) to meet standards.

2003 Capital Expenditure Status Report
Notes

Transportation

25. *Purchase of Vehicles and Aerial Devices:*
Budget: $2,141,000 Forecast: $2,328,000 Variance: $187,000

The change in this category is due to the fact that the cost of the heavy vehicle fleet units are approximately 6% higher than budget and an increase in cost associated with factory inspections and commissioning of the units.

26. *Purchase of Vehicles and Aerial Devices (2002 Project):*
Budget: $2,200,000 Forecast: $2,357,000 Variance: $157,000

The increase in this category resulted from the receipt of a line truck in 2002 that was part of the 2001 purchase ($157,000).

2003 Capital Expenditure Status Report
Notes

Telecommunications

27. Replace/Upgrade Communications Equipment:
Budget: $242,000 Forecast: $205,000 Variance: -$37,000

The deficiencies identified through inspections required less effort than originally estimated.

28. Substation Telephone Circuit Protection:
Budget: $141,000 Forecast: $89,000 Variance: -$52,000

An engineering study into the actual versus calculated ground potential rise at substations in the Newfoundland environment has been deferred pending the outcome of a Canadian Electricity Association review.

2003 Capital Expenditure Status Report
Notes

Information Systems

29. Application Enhancements:
Budget: $766,000 Forecast: $836,000 Variance: $70,000

The increase in this project reflects an increase in the functional requirements to enhance Business Support Systems including employee self-service improvements ($45,000), as well as an increase in the effort required to develop a SCADA information reporting application for system analysis purposes ($30,000).

30. Application Environment:
Budget: $755,000 Forecast: $846,000 Variance: $91,000

The increase in this project reflects increased use of external resources required to upgrade to current versions of the Oracle database, Powerhouse development tools and the OpenVMS operating system ($155,000). This also reflects the increased effort required to improve environment management procedures for the Facilities Management, SCADA and Spill Reporting applications ($60,000). This is partly offset by a deferral of the Microsoft Great Plains upgrade from Version 6.0 to Version 7.0, now planned for 2004 (-$124,000).

31. Personal Computer Infrastructure:
Budget: $634,000 Forecast: $564,000 Variance: -$70,000

The reduction in this project reflects lower than anticipated pricing of new Personal Computers (-$70,000).

32. Shared Servers Infrastructure:
Budget: $1,411,000 Forecast: $1,561,000 Variance: $150,000

A site assessment conducted by the vendor identified additional requirements for hardware and labour to upgrade the Unix operating system and SCADA software ($150,000).

2003 Capital Expenditure Status Report
Notes

Information Systems

33. Operations Support Systems (2002 Project):
Budget: $1,322,000 Forecast: $765,000 Variance: -$557,000

During the assessment of functional requirements for this project, it became apparent that the requirement could be met by utilizing a software module installed in conjunction with the Business Support Systems project. When combined with the work completed in 2001, the overall labour cost of the project was reduced (-$557,000).

34. Facilities Management (2002 Project):
Budget: $939,000 Forecast: $804,000 Variance: -$135,000

During the assessment of functional requirements for this project, the Company decided to reduce the scope and focus on two asset categories. When combined with the work completed in 2001, the overall labour cost of the project was reduced (-$135,000).

2003 Capital Expenditure Status Report
Notes

Unforeseen Items

35. Allowance for Unforeseen Items:
Budget: $750,000 Forecast: $375,000 Variance: -$375,000

This item is necessary to cover any unforeseen capital expenditures that have not been budgeted elsewhere. Projects, for which these funds are intended, are justified on the basis of reliability, or on the need to immediately replace deteriorated or damaged equipment. We have reduced the forecast for this item as we have completed half of the year without utilizing any of these funds.

Information Technology Strategy
2004 - 2008

NEWFOUNDLAND POWER
A FORTIS COMPANY

Contents

1. OVERVIEW

Newfoundland Power's IT strategy remains unchanged since 1999.

Newfoundland Power will continue to invest in technology to improve customer service and operating efficiency.

The current levels of customer service and cost control would not have been possible without the investment that the Company has made in IT. Maintaining and improving upon the gains in operating efficiency and customer service is essential to providing reliable service to customers at least cost.

2. BACKGROUND

During the course of Newfoundland Power's 2003 Capital Budget Application, the Company's planned 2003 expenditures on information technology ("IT") were reviewed.

In Order No. P.U. 36 (2002-2003), the Board of Commissioners of Public Utilities ("the Board") directed Newfoundland Power to prepare an updated IT Strategy Report for the period 2004-2008 as part of its 2004 Capital Budget Application.

This report is submitted in response to the Board's direction. It provides an overview of Newfoundland Power's IT strategy, describes how technology is supporting key functions, and outlines the Company's progress and plans in using IT to improve operating efficiency and customer service.

A description of the components of IT is found in Appendix A.

3. IT STRATEGY

3.1 A Look Back:

This section of the report explains how the Company's investments in IT have contributed to improvements in customer service and operating efficiency.

In 1999, Newfoundland Power's *IT Strategy 1999 to 2002* was filed with the Board as required by Order No. P.U. 36 (1998-1999). In summary, the Company's IT strategy involved the alignment of its IT investments with the imperatives of operating efficiency and customer service. Over the 1999-2002 period, the Company planned to invest $17.7 million in computer software applications and technology infrastructure. Actual investments over that period amounted to $16.9 million, a variance of approximately 5 percent.

IT investment has allowed the Company to remain responsive to the needs of customers by:

1. increasing its ability to react to the changing demands of customers and business partners;
2. improving effective communications between the Company and its customers;
3. efficiently processing large volumes of transactions during the normal course of business;

4. enhancing its ability to be more responsive to electrical system problems affecting customers; and
5. automating business processes to improve customer service and reduce costs.

Specific examples of the benefits of IT investments at Newfoundland Power can be found in Appendix B.

In 2001, the Canadian Information Productivity Awards recognized the Company with two awards in Customer Care for *Utilizing Technology to Deliver Superior Customer Service*. These awards recognized the positive impact that the Company's IT investment has made in providing service to customers.

The Company's focus has been to invest in sustainable and flexible IT applications and computing infrastructure. The Company has adopted a conservative approach to the selection of its IT assets, making informed choices from among the variety of technologies available and ensuring that the installed technologies are effectively managed. The Company has established several guiding principles to help direct its technology investment decisions. These can be found in Appendix C.

In the period 1999-2002, the primary issues that challenged effective IT investment management were obsolescence and rapid technological change. Responding effectively to these issues means not only making wise technology choices, but also choosing the most appropriate time to invest.

Highlights of the Company's investment in IT over the past five years include:

1. implementation of new technology within the Customer Contact Centre to handle customer inquiries and trouble calls;
2. implementation of a new software application to support the handling and reporting of trouble calls across the province;
3. implementation of a new system control and data acquisition ("SCADA") system to provide the capability and capacity for the Company to remotely monitor and control more of the electrical distribution system;
4. establishment of an Internet website that provides customers with another option of conducting business with the Company;
5. implementation of a new hand held meter reading system to collect meter readings from customer's premises;
6. implementation of a new software application to assist with the efficient management of electrical system assets;
7. implementation of a new software application to support the financial, human resources, payroll, purchasing, and inventory aspects of the Company; and
8. establishment of an Intranet to facilitate efficient communications and information sharing amongst employees across the province.

3.2 A Look Forward:

This section of the report describes the continuity of the Company's IT strategy for the next five years, which is to make investment technology decisions that will improve customer service and reduce costs. This strategy will be achieved primarily by making further investments in enhancing the technologies that are already installed throughout the Company.

General

Newfoundland Power's IT Strategy remains essentially unchanged from that described in *IT Strategy 1999 to 2002*. The Company will invest in technology to improve customer service or enable improved operating efficiency.

Newfoundland Power will remain focused on aligning its IT investment decisions with improving customer service and reducing costs. As well, the Company intends to extend and protect the value of its technology investments through regular enhancements and upgrades.

Over the next five years, the Company's IT investments will be focused more on getting further value out of its existing technology investments, and less on the implementation of new applications as in the past five years.

The current software applications in use throughout the Company provide many opportunities to make investments in order to obtain further efficiency gains and continue to improve service to customers. Some specific opportunities are outlined in the Company's 2004 Capital Budget Application under Application Enhancements. As new versions of existing software become available from vendors, new opportunities to gain efficiencies and improve customer service will also be available.

Obsolescence and Change

IT components eventually become obsolete for either technical or functional reasons. Technical obsolescence occurs when a technology component, such as a personal computer ("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.

The Company monitors industry developments with the assistance of leading consulting companies such as the Gartner Group[1] to ensure that its IT remains effective, and its investment decisions are sound. Advanced notice of obsolescence issues is critical to (1) ensuring that the Company is able to respond to these issues in a manner consistent with providing least cost reliable service to its customers, and (2) protecting the gains that have already been realized in customer service and operating efficiency through the use of technology.

[1] Gartner Group is a research and advisory firm that helps more than 10,000 businesses understand technology and drive business growth. Founded in 1979, Gartner is headquartered in Stamford, Connecticut and consists of 4,600 associates, including 1,400 research analysts and consultants, in more than 80 locations worldwide.

Change can also present challenges unrelated to obsolescence. The proliferation of PCs in the home, coupled with the ubiquity of the Internet, provides customers and business partners with a new way to interact with the Company. At the same time, the Internet has brought with it many new security issues that threaten the availability and integrity of computer systems worldwide, necessitating investments in security software and monitoring tools to protect IT investments and customer information.

4. 2004 CAPITAL BUDGET

This section of the report describes the planned 2004 capital expenditures in the Information Systems category of the Company's 2004 Capital Budget Application.

4.1 General

To continue to achieve value from its technology investments once they have been implemented, effective management of the technology assets are required. A description of the elements of effective technology management is provided in Appendix D.

The primary focus for the next five years, beginning in 2004, will be to invest in the technology already implemented in order to gain additional value from the Company's technology investments to the benefit of customers.

4.2 Applications

Application Enhancements
Enhancing existing applications to improve efficiencies and customer service will be a major focus for the Company. Applications such as the Customer Service System ("CSS"), the Internet and Intranet applications, Operations and Engineering applications, Business Support Systems, and SCADA will be enhanced to provide additional functionality. These enhancements will help to increase productivity, reliability and/or customer service and are a less expensive alternative to purchasing new applications. The proposed expenditures on these items are classified under the heading "Application Enhancements" in Schedule B to the 2004 Capital Budget Application.

Application Environment
Investment in the Application Environment is necessary to upgrade outdated technology and to take advantage of newly developed capabilities as part of the upgraded technology. The Application Environment, which includes the software products, development tools, and related components, is essential to ensuring that changes made to software applications are sufficiently tested and stable before deploying into the production environment, thereby mitigating the risks of downtime and customer service interruption. The proposed expenditures on this item, which also includes the payment for Microsoft Office and related software, are classified under the heading "Application Environment" in Schedule B to the 2004 Capital Budget Application.

Customer Systems Replacement
In 2003, the Company undertook a study to assess the viability of the existing CSS in light of pending technological obsolescence related to the OpenVMS operating system. After a thorough analysis, the Company has decided to keep the existing CSS beyond the current planning horizon, and will reassess the status of the CSS and the OpenVMS obsolescence issue in 2006.

A report entitled *Customer Service System Replacement Analysis* is submitted as Attachment A in Information Systems, Appendix 3 to the 2004 Capital Budget Application.

While the Company has decided to keep the CSS on the OpenVMS operating system, some of the smaller applications that integrate with the CSS will be moved to another operating system. Moving smaller applications from OpenVMS will increase the flexibility in customer communication at reduced cost. The proposed expenditures on this item are classified under the heading "Customer Systems Replacement" in Schedule B to the 2004 Capital Budget Application.

4.3 Infrastructure

Personal Computers

The Company will continue to effectively manage the life cycle of its PCs. Only employees with the appropriate application requirements will receive a new PC. Older, less powerful PCs will be reassigned or "cascaded" to employees with lesser capacity requirements. This extends the useful life of PCs and minimizes costs. The industry standard life is from three to five years. Over the past two years, the Company has been averaging a life cycle in excess of four years for its PCs. Also included in this project is the purchase of various shared devices such as printers and scanners and associated software. The proposed expenditures on this item are classified under the heading "Personal Computer Infrastructure" in Schedule B to the 2004 Capital Budget Application.

Network Infrastructure

The existing network equipment has reached the end of its useful life. In 2003, the Company began the process of upgrading its "wide area network". This network interconnects all area offices across the province back to St. John's. In 2004, the Company will complete the upgrade. This upgrade will reduce the risk of an interruption in service resulting from a hardware component failure, as the hardware components being implemented are more widely supported by the vendors. This item also covers the replacement of the "local area network" equipment within the area offices. This equipment is seven years old and has reached the end of its useful life. The proposed expenditures are classified under the heading "Network Infrastructure" in Schedule B to the 2004 Capital Budget Application.

Shared Server Infrastructure

Investment in Shared Server Infrastructure is required to complete hardware upgrades and replacements that are necessary to maintain current performance standards and to accommodate additional application and data requirements. This item also covers the replacement of tape drives used for performing backups for all of the Company's data that is stored on disks connected to servers. These tape drives are reaching the end of their useful life and have been prone to failure. Also included are upgrades to the SCADA infrastructure and security. The proposed expenditures on this item are classified under the heading "Shared Server Infrastructure" in Schedule B to the 2004 Capital Budget Application.

5. CAPITAL OUTLOOK: 2005 TO 2008

This section of the report describes the forecast 2005 to 2008 capital expenditures in the Information Systems category of the Company's Capital Budget.

5.1 General

Information Systems capital expenditures are expected to range from $3.5 million to $3.8 million over this period. The primary focus will be to extend the life and value of the existing investments in applications and technology infrastructure.

Monitoring of the CSS's continuing viability on the OpenVMS platform with a view to maximizing the system's life will be a key risk through this period. At this time, the projected IT capital expenditures through 2008 do not include any costs associated with replacing the CSS.

The dynamic nature of the IT industry makes it difficult to accurately predict future expenditure requirements. However, past experience and industry trends allow the Company to make informed estimates. The following assessment is based on just such estimates.

5.2 Projected Capital Spending: 2005 to 2008

Table 1 provides a summary of the Company's planned or projected capital expenditures on IT for the period 2005 to 2008.

Table 1
IT Capital Expenditure
(000s)

Category	2005	2006	2007	2008
Applications	$ 2,050	$ 2,245	$ 2,110	$ 2,185
Infrastructure	$ 1,700	$ 1,350	$ 1,350	$ 1,455
Total	**$ 3,750**	**$ 3,595**	**$ 3,460**	**$ 3,640**

5.3 Applications

Enhancements to existing applications will continue until new technology makes it more cost effective to replace the applications. Total investment in applications for the years 2005 to 2008 are forecast to be in the range of $2.1 million to $2.2 million per year.

Investments in application software upgrades will increase in the years 2006 and 2008, as many of the Company's application software products will require upgrades. Software vendors usually release new versions of their products every 18 months. Companies like Newfoundland Power must keep pace with these upgrades in order to retain support and maintenance from the vendor. As well these upgrades often provide new functions and features that enable the Company to take advantage of new customer service opportunities and additional efficiencies. For example, the Company expects that upgrades to the technology systems supporting the Customer Contact

Center will allow for more efficient and effective handling of e-mail, Internet and other electronic contacts with customers. Finally, investments in the upgrading of application software ensure that the applications needed to support functions such as customer service continue to be available. Annual expenditures in this area for 2005 to 2008 are forecast to average approximately $758,000.

Enhancements to the existing operations and engineering applications are estimated approximately at $388,000 per year. A new asset management application, to manage the maintenance of the Company's substation and generation assets, will be implemented in 2003. Enhancements to this application over time will allow the Company to improve operating efficiencies and customer service through the increased reliability of its system assets. As well, further improvements will be made to the SCADA application and to systems supporting work planning, scheduling and tracking over the period.

Enhancements to the CSS will continue as customer demands change and business process improvements are required. CSS enhancements are forecast to average approximately $372,000 per year.

Enhancements to other customer related systems will increase in 2005 as systems such as the outdated Cash Register System will require replacing at this time.

For the period 2005 to 2008, the Company will make additional investments in the Business Support Systems in order to continue to improve operating efficiencies. Annual expenditures are forecast at an average of approximately $131,000 each year.

Each year, the Company allows for minor improvements to all applications for unforeseen changes as a result of legislated requirements, changes required by external parties such as Canada Post, and for minor improvement opportunities identified by customers and employees. Annual expenditures are forecast at an average of approximately $150,000 a year.

Newfoundland Power will continue to invest in Internet and Intranet technology as customers' use of the technology grows, and to provide employees with improved capability to respond to customer's requests using more accurate and readily available information. Investments in the Internet and Intranet are forecast to remain stable over the 2005 to 2008 period, averaging approximately $156,000 each year.

As described in the *Customer Service System Replacement Analysis* report, the core CSS is expected to remain on OpenVMS for the next five years, with a re-assessment taking place in 2006. However, portions of the CSS will continue to be moved away from OpenVMS. Annual expenditures are forecast to average approximately $193,000 over the 2005 – 2008 timeframe.

5.4 Technology Infrastructure

Investment in the technology infrastructure will continue as the existing infrastructure ages and requires replacement, and advances in hardware technology allow for more efficient and reliable support of the Company's business applications. Total technology infrastructure investments for the years 2005 to 2008 are forecast to be in the range of $1.4 million to $1.7 million per year.

Continued investment in PCs will be necessary as the existing technology reaches the end of its useful life. New technologies, such as thin-client computing, are beginning to mature that will serve to extend the useful life of PCs even further. While the number of PC replacements and the cost per unit will vary from year to year, the total annual cost is projected to average approximately $550,000.

By the end of 2004, the Company will have replaced the major components of the communication network. In 2005, an investment of $250,000 will be required to accommodate application requirements such as information reporting and data backups. Beyond 2005, an annual investment of approximately $50,000 is necessary to accommodate network growth.

Application reliability and the need to effectively manage the technology infrastructure is very important for the provision of reliable customer service at least cost. Investments in infrastructure monitoring and security enhancements are forecast to average approximately $58,000 per year.

Ongoing investment in the server infrastructure is required to ensure the continued availability of the applications, such as the CSS, that reside on these servers. Expenditures involve upgrades to server components such as disks and memory and the replacement of servers that have reached the end of their useful life. Expenditures in server infrastructure are expected to average approximately $705,000 annually over the 2005 to 2008 period. Similar technology upgrades will also be required for the SCADA infrastructure to ensure that this application remains available to monitor and control the electrical system. Investment in the SCADA infrastructure is forecast to average approximately $50,000 annually.

6. IT TRENDS

This section of the report provides a view of developing trends in IT, from a utility perspective. Investment in these technologies by Newfoundland Power will be determined by the realizable improvements in customer service and operating efficiency that can be achieved.

Newfoundland Power keeps informed of emerging IT trends through various sources such as leading industry analyst organizations like the Gartner Group and Meta Group[2], industry publications such as Public Utilities Fortnightly, Platt's Energy Business and Technology, and Computing Canada, software supplier user groups as well as attending industry conferences and online seminars. With a focus on cost savings and customer service Newfoundland Power takes a conservative approach to implementing IT, ensuring that trends are well established and can provide value to the Company and its customers. Should specific trends justify capital expenditures, the Company will budget for them accordingly.

The following is a summary of the IT trends, from a utility perspective, that the Company is monitoring.

[2] META Group is a research and advisory firm that helps more than 3,300 businesses in 40 countries understand technology and drive business growth. Unlike Gartner and other advisory firms, META Group also provides vertical expertise and coverage of the IT solutions for industries such as energy and utilities.

Mobile computing
Wireless computing is continuing to evolve and is transforming the use of pen and paper. Personal Digital Assistants, Tablet PCs, rugged laptops, digital ink, radio frequency identification and tagging technologies may replace pen and paper. The use of portable mobile computing devices is increasing within the industry. This could provide new opportunities for the Company in improved customer service and operational efficiencies for employees who spend most of their time in the field.

Collaboration and Self-Service
With the increase in the adoption rate of the Internet and such technologies as instant messaging, portals (personalized intranets and internets), interactive voice response and electronic bill payment, sharing information between companies, customers and suppliers continues to increase. With opportunities to increase customer service and satisfaction as well as reduce costs, companies continue to promote customers' use of the Internet and interactive voice response for self-service. Internally, companies look for ways to improve access to information by effectively utilizing technologies for improved document and content management, ad-hoc reporting, and online analytical reporting.

Computing Platforms (including Operating Systems)
Operating systems such as Linux are being implemented in many organizations as a complement, or as an alternative, to other operating systems (such as Unix or Windows). An open source operating system (meaning that it is not owned by one particular vendor), Linux is being used more and more for file, print and web server applications.

Transformation and Reuse
A recent trend in the IT industry is that companies are striving to ensure maximum value is derived from their existing technology investments as opposed to buying more. Companies are doing this by transforming existing applications by upgrading, migrating, consolidating, and integrating. Technological investments are focusing on continual improvement in operational productivity through the automation of manual processes and improved integration with existing technology.

Systems Integration
Integration is being placed at the top of the list of goals for many companies as they strive to create a real-time agile service oriented business. Integration connects business processes, application, data, customers and business partners. Some of the benefits derived include creating a more cohesive and fluid business processing environment while streamlining business responsiveness. Businesses will continue to improve integration between their software applications, external suppliers, and customers to achieve operational efficiency by reducing duplication and inconsistency.

Customer Relationship Management (CRM)
CRM applications provide functionality in sales, marketing, call centres, customer service and support. The trend of integrating them back into back office systems (financial, human resources) and customer information systems will continue as organizations implement these solutions to complement their existing customer service processes. This may help to improve operational efficiency and customer service.

Business Process Outsourcing
The delegation of business processes to external service providers that own and/or manage the process will continue to rise, allowing organizations to focus on core business with the potential to improve existing processes and reduce overall operating costs.

Newfoundland Power will continue to carefully consider the experience of other organizations and to employ industry best practices in its evaluation and management of IT products and services. This strategy will ensure that the required technology solutions are implemented at a minimum cost over the long term. The Company will monitor trends but will not make significant investment unless the technology will result in improvements in productivity or customer service and are well proven in the industry.

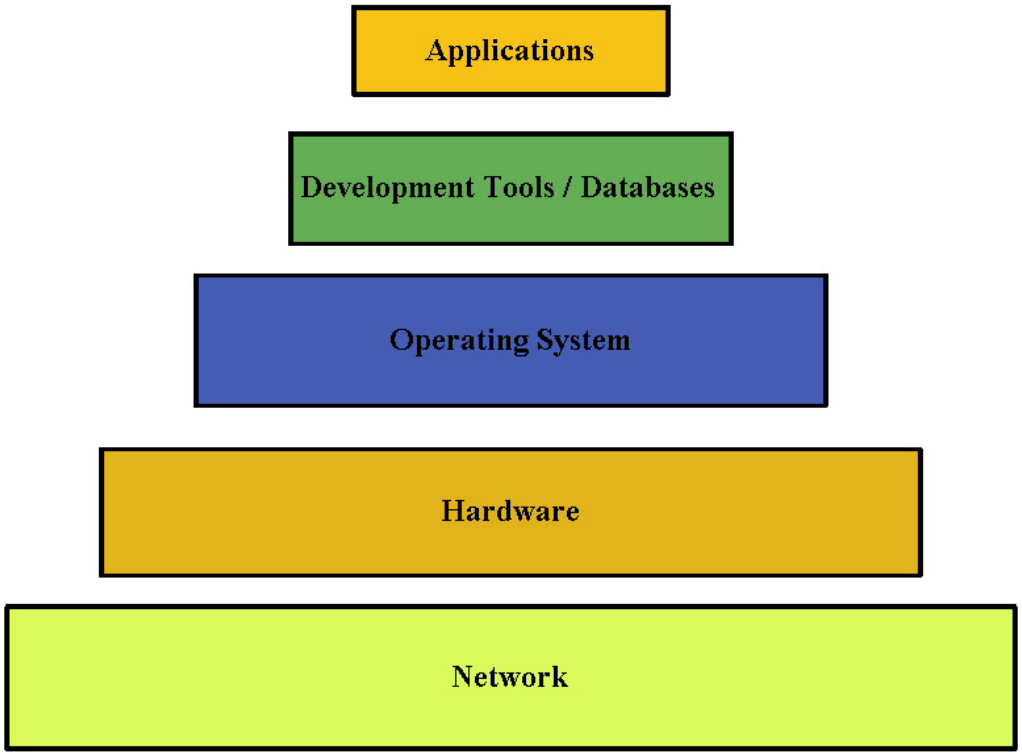
Appendix A

THE COMPONENTS OF IT

Introduction

The term IT 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 IT infrastructure can be complex, the basic structure can be simply illustrated as follows:



The Network

The foundation of the entire IT 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 Asset Management System.

Expenditures related to hardware are typically provided for in the Shared Server 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 enhancements 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 IT components described above are interdependent. If there is a failure in any one of these components in an IT 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 IT 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 IT components that are critical to customer service delivery, employee productivity, and electrical system reliability to ensure they are always functioning as required.

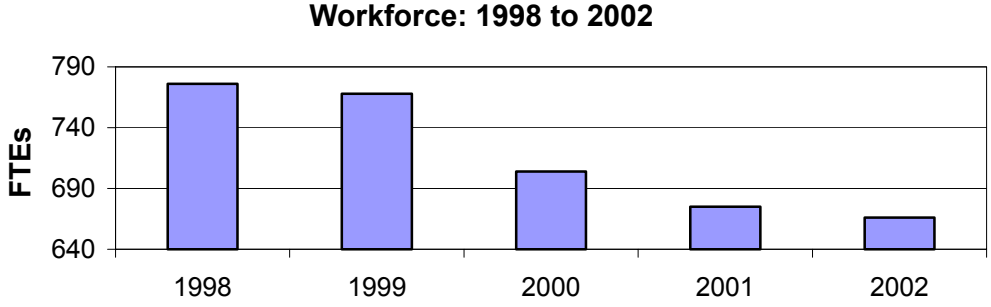
Appendix B

BENEFITS OF IT AT NEWFOUNDLAND POWER

IT is critical for Newfoundland Power to maintain and improve customer service and provide a low cost supply of electrical energy. The benefits of IT at Newfoundland Power can be seen in the following areas:

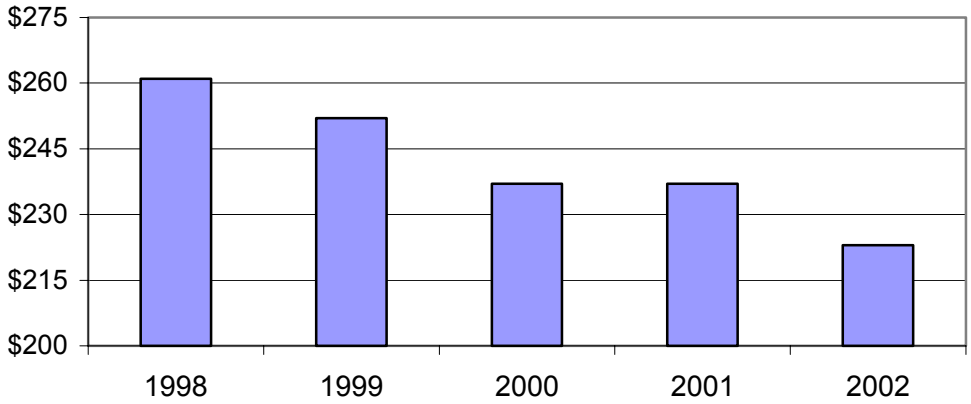
- *Meeting customer expectations* by supporting interactions with customers, enabling flexible services, and accommodating changing customer needs. For example, the Company's Internet site provides twenty-four hour self-service capability, including energy usage graphs and electronic billing. One of the means the Company uses to gauge its level of success in meeting customer expectations is its Customer Satisfaction Index. In 2002, the Customer Satisfaction Index reached an all time high of 91%.

- *Achieving productivity improvements and cost savings* by automating manual processes, reducing transaction costs, and minimizing staff requirements. For example, the use of hand held meter reading devices has reduced the time required to capture and process meter readings and produce a customer's bill from five days to one day. Productivity improvements such as these have helped with reducing the number of Full Time Equivalents ("FTEs"). At year-end 2002, the Company was operating with a workforce of 666 FTEs, a reduction of 14.8% since 1998.



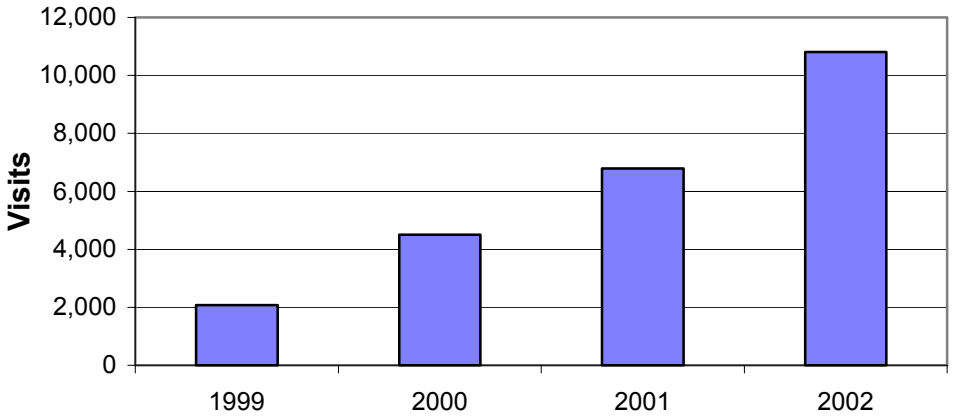
The Company also continues to decrease the operating cost per customer served. Since 1998, the operating costs per customer served have decreased 14.6%.

Operating Costs per Customer Served



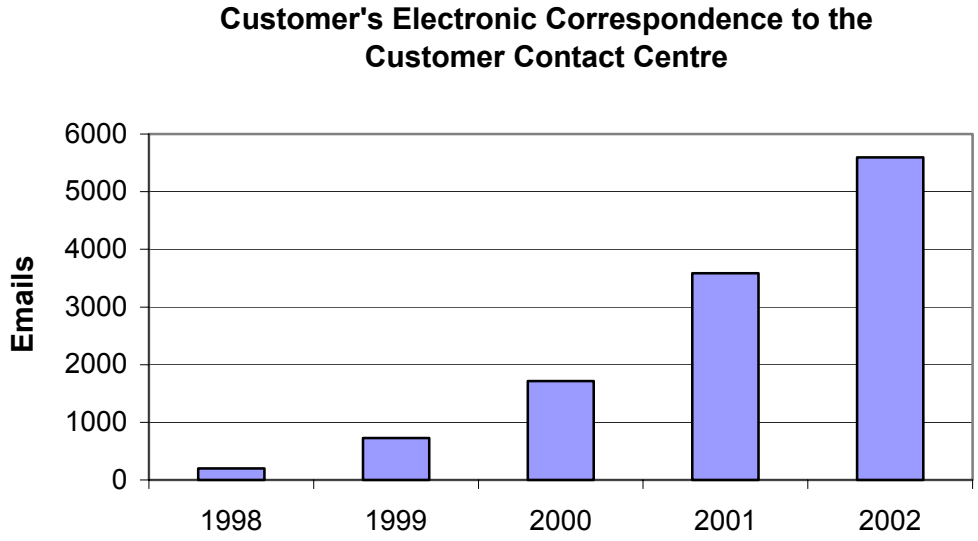
- *Enhancing communications* amongst employees and between the Company, its customers and outside suppliers, by providing the parties with a means to send and receive correspondence in much less time than is possible with traditional methods of communication. Employees are also able to collaborate and share documents from remote distances. The key benefit of enhanced communications is reduced operating costs and quicker response to business and customer requirements. The demand for enhanced communications is rising especially through customer's use of the Internet and email. Since 1999, average monthly visits to the Company's Internet website have increased over 400%.

Average Monthly Visits to Internet Website

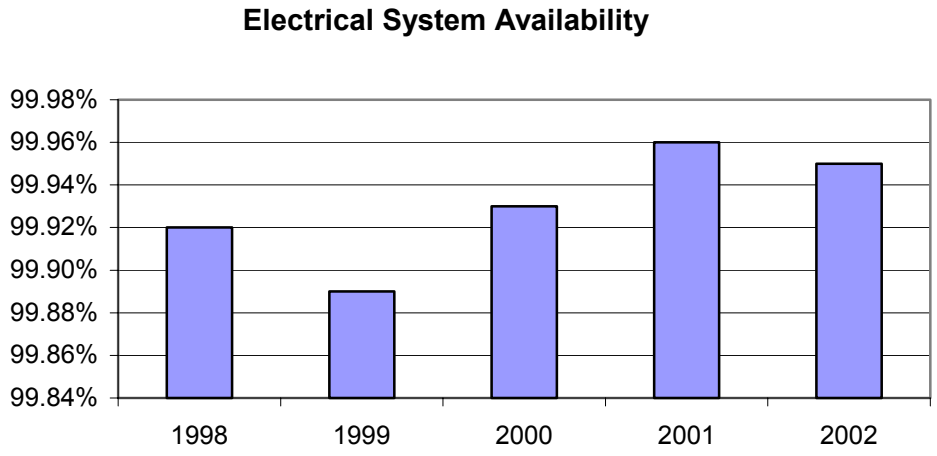


- *Processing large volumes of transactions* efficiently and effectively. Applications such as the CSS and the Back Office Support System ("BOSS") allow the Company to capture, process, and store transactional data for future reference with minimal manual intervention, increased data quality, and reduced operating costs. For example, the CSS allows the company to annually process over 2.4 million bills, 140,000 service orders, and answer over 350,000

customer calls and 5500 customer emails. Since 1998, the number of customer emails to the Company has grown significantly.



- *Aiding electrical system reliability and power quality* by facilitating improved monitoring, control, and maintenance of the electrical system. Using the SCADA system located in the System Control Centre ("SCC") in St. John's, SCC staff monitor the electrical distribution and generating system for problems and can take corrective action immediately.



Appendix C

GUIDING PRINCIPLES

Introduction

To ensure that the Company's investments in IT 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 IT investment decisions. These practices were first outlined in the *Information Technology Strategy 1999-2002* filed with the Board in 1999 and continue to guide the Company's IT investment decisions today.

Standard Practices

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 IT 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 IT staff to more cost effective activities. IT

industry consultant Gartner Group[1] advises that building applications for one's own use is "the most expensive deployment option."[2]

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 IT choices, Newfoundland Power takes a conservative approach to investing in IT by only adopting proven technology. This means that Newfoundland Power will purchase IT 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.

Conclusion
Newfoundland Power manages its investments in IT 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 IT 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 in these Guiding Principles provide a useful framework for making cost-effective decisions in IT investment.

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[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.

Appendix D

ELEMENTS OF IT MANAGEMENT

Introduction

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

As functionality requirements evolve and as capacity requirements grow, the Company's IT 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 IT infrastructure and, in particular, protection from external infiltration.

Newfoundland Power manages its IT 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 IT management.

Enhancements

Most IT 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 hand held meter reading system to include CSS service orders for final reading requests from customers.

IT 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.

IT monitoring applications are provided for in the Company's capital budgets under Shared Server 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 IT security are provided for in the Company's capital budgets under Shared Server Infrastructure.

Obsolescence

IT 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 IT at Newfoundland Power including software, the network, servers, and operating systems. Decline in vendor support for an IT 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 IT resources. Industry information on technical obsolescence enables the Company to take appropriate measures to minimize its impact on the Company's IT 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.

Obsolescence permeates all aspects of IT management at Newfoundland Power. Projects to address obsolete technology may be found in any number of the Company's capital budget projects.

2004 Capital Budget Plan

July 25th, 2003

NEWFOUNDLAND POWER
A FORTIS COMPANY

CONTENTS

I. OVERVIEW

In Order No. P.U. 36 (2002-2003) (the "Order"), the Board of Commissioners of Public Utilities for Newfoundland and Labrador (the "Board") expressed its view that stable and predictable year over year capital budgets was a desirable objective for Newfoundland Power (the "Company"). In the Order, the Board also recognized that uncertainties and exigencies faced by the Company would challenge year over year capital expenditure stability.

The 2004 Capital Budget Plan (the "Plan") was prepared with a view to providing a measure of stability to the Company's capital expenditures over the period 2004 through 2008. The Plan also reviews expenditures over the period 1993 through 2003 and indicates the material factors that influenced capital expenditure patterns through this period.

While the Company accepts the Board's view of the desirable effects of year to year capital expenditure stability, the nature of the utility obligation to serve will not, in some circumstances, necessarily facilitate such stability. The Plan has identified some risks to such stability in the period 2004 through 2008.

As the Company progresses through the 2004 through 2008 period, its view of the capital expenditures necessary to fulfill its obligation to serve can be expected to change. In proposing annual capital expenditures, the Company will have due regard for the Board's stated desire for relative year to year stability in capital budgets.

II. CONTENTS OF THE PLAN

This report is filed by Newfoundland Power as part of its 2004 Capital Budget Application in compliance with the Board's directives in the Order.

Further to the directives contained in the Order, the Plan includes the following:

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

III. CAPITAL EXPENDITURES: 1993 - 2003

This section of the report analyzes capital expenditures for the period 1993 through 2003 and examines the changing capital expenditure patterns and variances from budget over this period.

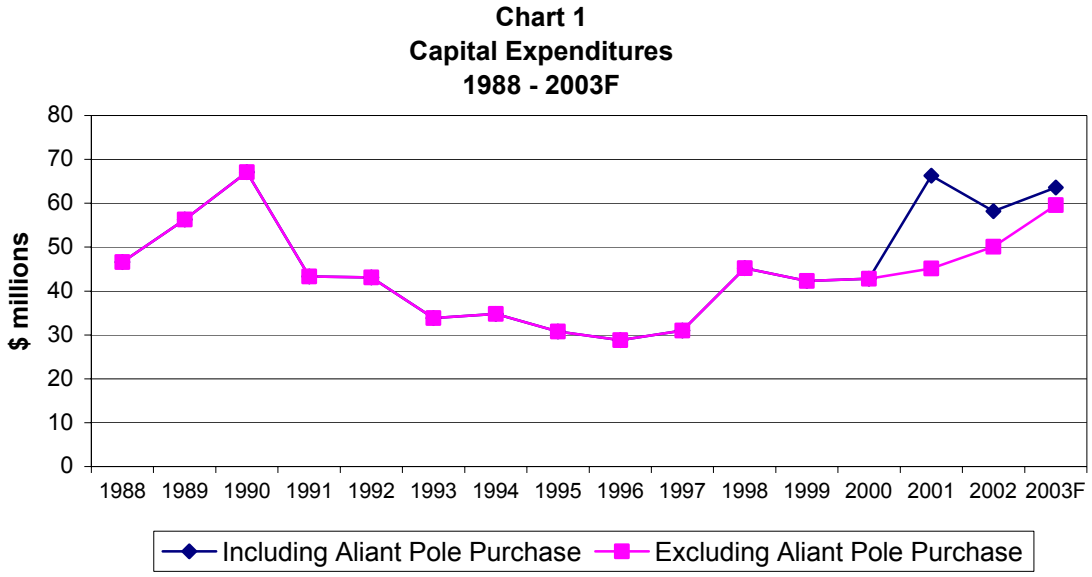
A. Analysis of Capital Expenditures: 1993 - 2003

The year 1993, which is the first of the ten years under review, was also the first full year following the cod moratorium in 1992. The cod moratorium materially affected the economy of the province, and with it, the capital expenditures of Newfoundland Power, for at least the next five years.

In order to provide a context for comparison of the capital expenditures for the period following the cod moratorium it is useful to consider capital expenditure levels prior to 1993. Chart 1 below provides information regarding capital expenditures for the period 1988 to forecast 2003.

As shown in the chart, capital expenditures over the past 16 years have ranged from a high of approximately $67 million in 1990 to a low of approximately $29 million in 1996. Closer analysis of the expenditures indicates that, excluding expenditures related to the purchase of joint use poles from Aliant Telecom Inc. (Aliant), average capital expenditures (unadjusted for inflation) during the 1999 to forecast 2003 period are lower than expenditures incurred during the 1988 to 1992 period.

Overall, the most significant reason capital expenditures have increased over the period 1993 to forecast 2003 relates to the replacement of deteriorated, defective or obsolete plant and equipment. In recent years, the Company adopted a more proactive approach that balances the maximization of the life of the asset with delivery of electrical energy to customers at the lowest possible cost consistent with reliable service.



B. Changing Capital Expenditure Patterns: 1993 – 2003

During the 1993 through 1997 period actual capital expenditures were fairly constant, averaging approximately $32 million per year. Since 1997, actual capital expenditures have averaged approximately $53 million per year.

An analysis of capital expenditures by both capital budget category and origin is included in Appendix A. The budget category for capital expenditures signifies the type of asset, for example, transmission. The origin of capital expenditure determines the reason for the expenditure, for example, customer/sales growth.

Charts 2 and 3 summarize capital expenditures by budget category and origin respectively for the period 1993 through forecast 2003. Given the extraordinary and self-sustaining nature of the capital expenditures related to the purchase of joint use poles from Aliant, they have been excluded from the analysis of capital expenditures by origin shown in Chart 3. This will enable a more comparative year over year analysis of the composition of the Company's capital expenditures.

Chart 2
Capital Expenditures by Budget Category
1993 - 2003F

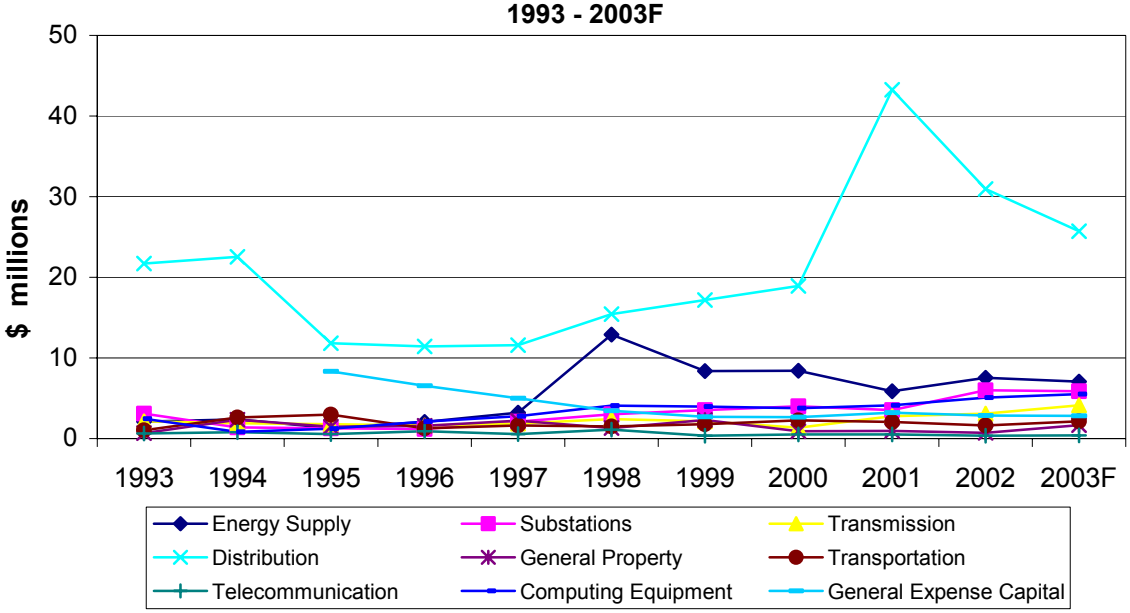
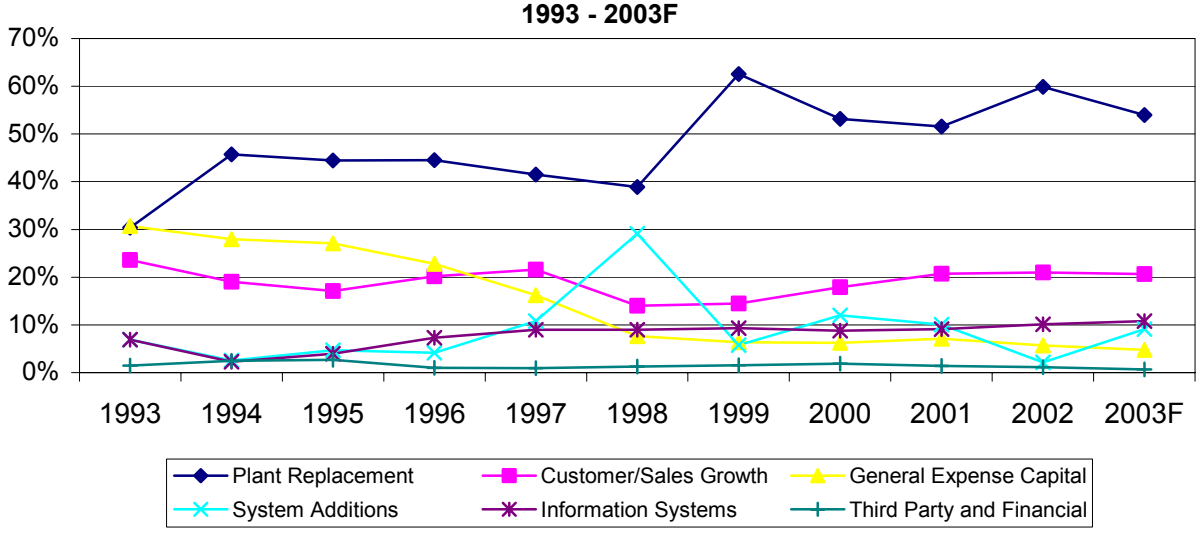


Chart 3
Capital Expenditures by Origin
1993 - 2003F



Analysis of the budget category and origin of capital expenditures for the period 1993 through forecast 2003 indicates that the changing pattern of capital expenditures is materially influenced by the following factors:

1. Purchase of Aliant poles;
2. The Rose Blanche Hydroelectric Plant;
3. Plant Replacement;
4. Customer Demand;
5. Information systems;
6. General expenses capitalized; and
7. Inflation.

1. Purchase of Aliant poles

The distribution capital budget category increased dramatically in 2001. This was due to the acquisition of the Aliant joint-use poles for approximately $41 million. This resulted in additional distribution capital expenditures of $21.2 million in 2001, $8.1 million in 2002 and $4.0 million in 2003.

The purchase of the Aliant joint-use poles was justified by economies of scale which have the effective result of reducing the amount of pole costs required to be recovered in electricity rates.

2. The Rose Blanche Hydroelectric Plant

System additions in the energy supply budget category increased when the Rose Blanche Hydro Plant, which was commissioned in 1998 at an approximate cost of $13.5 million, was added to the system.

3. Plant Replacement

Newfoundland Power is primarily a distribution utility. Improvements in the reliability of the service the Company provides will be to a large extent, but not totally, a function of the quality of the distribution system.

Plant replacement has accounted for an increasing proportion of capital expenditures since 1999. From 1993 through 1998, plant replacement accounted for between 30% and 46% of the Company's capital expenditures. Since 1999, that proportion has consistently exceeded 50% (excluding capital expenditures related to the Aliant joint-use pole acquisition).

Since 1999, Newfoundland Power has undertaken targeted initiatives to improve distribution reliability by rebuilding its poorest performing distribution feeders.

As part of its 2003 general rate application the Company filed a new depreciation study, conducted by depreciation expert Gannett Fleming. The study recommended lower annual depreciation rates principally because the Company's assets, including its distribution assets, are expected to last longer. The Company believes that the outcome of this depreciation study is an indication that its plant replacement strategy is working.

Depreciation is the loss of asset service value not restored by current, or operating, maintenance. Annual depreciation expense is expected to approximate $30 million in 2003 which is also approximately 50% of the most current forecast of the 2003 capital budget. While depreciation is not intended to reflect replacement cost, the fact that the order of magnitude of the depreciation expense and the amount expended on asset replacement are similar does provide some indication of the appropriateness of the Company's plant replacement strategy.

4. Customer Demand

The obligation to serve requires the Company to make capital expenditures to meet customer demand. Customer demand, in turn, is reflective of economic conditions.

With improved economic conditions in recent years, the level of expenditures related to the installation of new plant and equipment necessary to meet customer/sales growth requirements has increased. Capital expenditures related to customer/sales growth have ranged from a low of $5.3 million in 1995 to a high of $12.2 million in 2003.

As shown on Chart 3, the percent of total capital expenditures related to customer/sales growth declined from 1993 through 1998. Since 1998, with improved economic conditions the percent of total capital expenditures related to customer/sales growth and meeting customer requirements has increased.

5. Information systems

Information Systems capital expenditures as a percent of total capital expenditures showed a gradual increase during the 1993 through 2003 period. This area of capital expenditures has been directed towards improving customer service and responsiveness and maintaining overall operating efficiency of the Company.

6. General expenses capitalized

While all other factors discussed in this section result in increased capital expenditures in recent years, the decline in General Expense Capital ("GEC") has reduced the Company's annual capital budget. The decline flows from Order No. P.U. 3 (1995-96) which directed the Company to change its method of allocating GEC. As a result, GEC which is included as part of the Company's annual capital budget has declined from approximately $10 million in 1993 to approximately $3 million in 2003. Prior to 1995, GEC was not shown as a separate budget category but included as part of the various budget categories.

7. Inflation

Given the long life of most utility assets (approximately 30 years) , the replacement cost of assets will tend to be significantly higher than current embedded costs simply as a result of inflation. During the 1993 through 2003 period inflation as measured by the Gross Domestic Product Implicit Price Deflator increased by approximately 20%. 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 can be multiples of the original cost.

C. Capital Expenditure Variances from Budget

Budget variances are unavoidable given the time between the completion of the budget process and the execution of capital projects. Variances can arise due to any number of factors including: changes in the work due to third parties; 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.

From 1993 through forecast 2003 there were a number of factors that have impacted capital expenditure variances from budget.

First, the volatility of economic conditions varied significantly during the period. If forecasts of customer and energy growth are either lower or higher than actual experience, capital expenditures related to customer and energy growth will typically be correspondingly lower or higher than budget. In recent years economic growth has been higher than anticipated and as a result capital expenditures related to customer and energy growth are higher than budgeted.

Second, since 1997 the Company has completed a full review of its budget methodology and continues to make modifications where appropriate. As a result the accuracy of the Company's budgeting has improved.

Third, the Company now submits the budget earlier in the year for regulatory approval. This enables the Company to start work earlier in the year if winter conditions permit. Therefore, the need to either cancel or defer a project due to time constraints is reduced.

As a result of these factors the overall level of capital expenditure variances from budget has been reduced. Appendix B contains a detailed breakdown of material variances by budget category along with an explanation of those variances.

IV. CAPITAL BUDGET PLAN

This section of the report outlines a five-year capital budget plan (the "Plan") for maintaining the stability of the capital budget, including an assessment of risks to the Plan which could cause budget growth to exceed that planned. In addition, this section assesses maximum budget growth and contingencies for unusual events during this period.

A. Plan Overview

The Company plans to invest approximately $260 million in plant and equipment during the 2004 through 2008 period. Over the period capital expenditures are forecast to remain relatively stable and consistent with the average for the past six years. Capital expenditures are expected to average approximately $53 million annually and range from a low of $49 million in 2008 to a high of $52 million in 2006.

In recent years, the Company has focused attention on rural distribution lines where reliability has been appreciably worse than the Company average. Over the next 5 years, the Company will continue its efforts to refurbish distribution lines that have performed poorly with respect to reliability. These distribution lines tend to be either very old, or are exposed to abnormally adverse weather conditions.

The Plan 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.

The Plan will continue to address the issue of radial systems, which rely on a single link between the energy source and customers. On radial systems a failure of any critical component will result in an outage in all of the communities supplied by the system. As a result, customers served by radial systems generally experience more and longer power interruptions than those served by looped systems. Radial lines to Old Perlican and New-Wes Valley are currently addressed in the Plan. Other radial systems like Trepassey and Port-aux-Basques will be analyzed further and may impact capital budgets in the future.

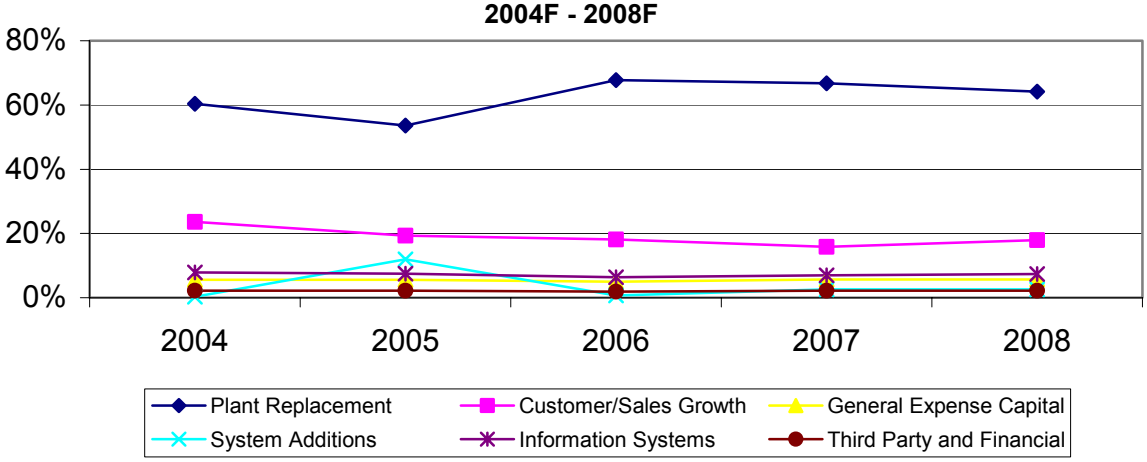
Many of the Company's hydro generating plants, substations and office buildings are in excess of 50 years old. The Plan will address the replacement of major components at many of these facilities in order to remove deteriorated or obsolete plant from service. The Plan addresses replacing penstocks at the New Chelsea, Rattling Brook, Hearts Content and Rocky Pond hydroelectric plants. These expenditures are required to maintain energy production levels and to maintain safe and reliable service to customers.

The Company will continue to invest in information technology to maintain existing systems, as well as invest in projects that introduce further improvements in customer service, operational efficiency and public and employee safety.

B. Plan by Origin and Category

The Plan continues to focus on the replacement of deteriorated, defective or obsolete electrical equipment which accounts for approximately 60% of total expenditures (excluding the purchase of joint-use poles from Aliant). Mirroring forecast economic performance for the province, the expenditures related to customer and sales growth are expected to decline from 22% of total expenditures in 2004 to 18% in 2008.

Chart 4
Capital Expenditures By Origin
2004F - 2008F



A summary of planned capital expenditures for the 2004 - 2008 period by category along with a breakdown by project is contained in Appendix C. Overall, planned expenditures are expected to remain stable in all categories with the exception of Energy Supply, Transmission and Distribution. The following briefly summarizes each category.

1. Energy Supply

The Energy Supply category includes capital expenditures related to the replacement of deteriorated plant and equipment at the Company's hydro plants and thermal generating stations, as well as the purchase of a portable generator in 2004. While these facilities are relatively small when viewed as stand-alone production centers, collectively they displace approximately 700,000 barrels of oil (at an estimated annual cost of approximately $20 million) burned at Newfoundland and Labrador Hydro's Holyrood Thermal station, contribute to system reliability and, in many cases, provide a source for local backup.

With the exception of 2006, Energy Supply capital expenditures average $5.4 million per year. The increase in 2006 is related to the rehabilitation of the Rattling Brook Plant, the Company's largest hydroelectric plant. This major project includes the replacement of the penstock, surge tank and other key components of the plant.

2. Substations

The Substation category includes capital expenditures related to rebuilding substations, replacement and spare substation equipment, feeder remote control, and the addition of transformer capacity. The replacement and spare substation equipment capital expenditures involve 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. The projects in this category focus on improved system reliability and operational efficiency, safety, reduced environmental risk associated with oil-filled reclosers, and responding to customer growth.

Substation capital expenditures are expected to average $6.2 million annually over the 2004 through 2008 period.

3. Transmission

The Transmission category includes capital expenditures related to rebuilding transmission lines. The projects include: replacement of poles, crossarms, and conductor; replacement of pin type and suspension insulators; and improvement of conductor sag and clearances. The projects also include the construction of a new line that will convert the existing Old Perlican radial system to a looped system. The projects in this category are primarily focused on reliability and safety.

Transmission expenditures will increase from $2.3 million in 2004 to an average of $6.2 million annually over the 2005 through 2008 period.

4. Distribution

The Distribution category includes capital expenditures for extensions, services, street lighting and transformers that are influenced by growth in the number of customers served by the Company. These capital expenditures are determined with reference to the Company's forecast of new customers using historical capital expenditures as a guide. This category also includes reconstruction projects that are primarily focused on maintaining reliability and safety.

The Distribution category also includes capital expenditures related to the relocation of plant at the request of third parties. A significant portion of these costs are recovered from the parties making the request.

Distribution capital expenditures are expected to decline from $27.6 million in 2004 to $19.4 million in 2008. The decline in capital expenditures is related to forecast reduced growth in the number of customers served and the completion of the purchase of the joint-use poles from Aliant in 2005. During this period capital expenditures related to the replacement of deteriorated, defective or obsolete plant and equipment are expected to remain stable and similar to the capital expenditures recorded in 2003.

5. General Property

The General Property category includes capital expenditures for the addition or replacement of tools and equipment utilized by line and support staff in the day-to-day operation of the Company, as well as the replacement or addition of office furniture and equipment. The category includes additions to real property necessary to maintain buildings and facilities and to operate them in an efficient manner.

General Property capital expenditures are expected to average $1.0 million annually over the 2004 through 2008 period.

6. Transportation

The Transportation category includes the replacement of existing heavy fleet, passenger and off-road vehicles. The replacement of these vehicles can be influenced by a number of factors including kilometres traveled, vehicle condition, operating experience and operating expenditures.

Transportation capital expenditures are expected to average $2.7 million annually over the 2004 through 2008 period.

7. Telecommunications

The Telecommunications category includes the replacement or upgrading of various communications systems. These systems contribute to customer service, safety, and maintenance of power system reliability by supporting communications between the Company's fleet of mobile vehicles and the various plants and offices.

Telecommunications capital expenditures are expected to average $0.3 million annually over the 2004 – 2008 period.

8. Information Systems

The Information Systems category includes: the replacement of personal computers, printers and associated assets; upgrades to current software tools, processes, and applications as well as the acquisition of new software licenses; and, the development of new or enhancements to existing applications to support changing business requirements and take advantage of new developments and product improvements.

Information Systems capital expenditures are expected to average $3.7 million annually over the 2004 through 2008 period.

C. Plan Risks

Newfoundland Power has an obligation to serve customers located in its service territory. Therefore, should customer and energy growth vary from forecast so will the capital expenditures which are sensitive to growth. For instance, the Company is aware of a potential mine that, if developed, would require additional capital expenditures in the order of $5 million. Due to the uncertain nature of the project proceeding at this time it was not included in the Plan.

The Plan partially addresses the issue of radial systems. These systems currently experience more and longer power interruptions than those served by looped systems. While the Plan includes looping the system serving the Old Perlican area in 2005, at an estimated cost of approximately $5.1 million, no further projects of this nature are included in the Plan beyond 2005. This is an area where the Company intends to focus engineering effort in the future to determine a viable solution for these areas. Any projects flowing from this could put upward pressure on the Plan.

The Company's Customer Service System ("CSS") is 11 years old. As the replacement cost of a CSS system could be as high as $15 million the Company is taking steps to extend the life of CSS through 2008. Accordingly, while the Company has no plans to replace CSS during the 2004 through 2008 period, changing technology and vendor support could conceivably dictate otherwise. Eventual replacement of the CSS will likely be staged over more than 1 year.

Overall, planned capital expenditures are forecast to be relatively stable during the 2004 through 2008 period, however, circumstances can change and, as a result, so will priorities and the level of capital expenditures.

Assessment of maximum budget growth in this period necessarily involves a significant degree of conjecture. Given that a single customer addition (i.e., such as the one mentioned above) could add additional capital expenditures of $5 million, a maximum annual capital budget could approximate $60 million. In such a case, it is expected that certain otherwise justifiable projects might be deferred in a way that minimizes the negative impact of deferral on the quality of service.

In each year of the Plan, the Company's forecast budget includes $750,000 for unforeseen items and $150,000 for unidentified major electrical equipment repairs. This amounts to a total of almost $1 million per year in the nature of contingency for unexpected or unusual events.

While these amounts are not in the nature of *approved* expenditures, they provide an allowance for unexpected events of almost 2% of the average budget. The allowance of a larger contingency of, say, 5% of the average budget, or approximately $2.6 million, would permit greater flexibility to the Company. However, the number of supplementary approvals required in recent years has not been unduly large or burdensome.

Newfoundland Power Inc.
Capital Budget Expenditures - By Budget Category
(000s)

Budget Category	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003F [1]
Distribution	$ 21,710	$ 22,527	$ 11,840	$ 11,448	$ 11,580	$ 15,422	$ 17,171	$ 18,928	$ 43,257	$ 30,966	$ 27,614
	64.1%	64.8%	38.5%	39.8%	37.4%	34.1%	40.6%	44.2%	65.2%	53.2%	43.7%
Energy Supply	2,115	2,378	1,321	2,061	3,225	12,888	8,359	8,430	5,871	7,520	9,194
	6.2%	6.8%	4.3%	7.2%	10.4%	28.5%	19.8%	19.7%	8.9%	12.9%	14.5%
Substations	3,104	1,372	1,278	1,179	2,102	3,029	3,529	4,000	3,542	5,986	8,040
	9.2%	3.9%	4.2%	4.1%	6.8%	6.7%	8.3%	9.3%	5.3%	10.3%	12.7%
Computing Equipment	2,451	829	1,214	2,105	2,775	4,080	3,953	3,754	4,124	5,074	6,399
	7.2%	2.4%	3.9%	7.3%	9.0%	9.0%	9.3%	8.8%	6.2%	8.7%	10.1%
Transmission	2,140	1,907	1,790	1,634	1,855	2,425	2,149	1,334	2,765	3,089	4,291
	6.3%	5.5%	5.8%	5.7%	6.0%	5.4%	5.1%	3.1%	4.2%	5.3%	6.8%
General Expenses Capital	-	-	8,346	6,556	5,014	3,465	2,682	2,678	3,211	2,868	2,800
	0.0%	0.0%	27.1%	22.8%	16.2%	7.7%	6.3%	6.3%	4.8%	4.9%	4.4%
Transportation	1,036	2,616	2,964	1,273	1,639	1,521	1,797	2,276	2,061	1,609	3,076
	3.1%	7.5%	9.6%	4.4%	5.3%	3.4%	4.3%	5.3%	3.1%	2.8%	4.9%
General Property	688	2,352	1,477	1,584	2,213	1,294	2,298	930	944	715	1,047
	2.0%	6.8%	4.8%	5.5%	7.1%	2.9%	5.4%	2.2%	1.4%	1.2%	1.7%
Telecommunications	618	792	552	930	562	1,121	344	506	530	343	418
	1.8%	2.3%	1.8%	3.2%	1.8%	2.5%	0.8%	1.2%	0.8%	0.6%	0.7%
Unforeseen											375
											0.6%
Total	**$ 33,862**	**$ 34,773**	**$ 30,782**	**$ 28,770**	**$ 30,965**	**$ 45,245**	**$ 42,282**	**$ 42,836**	**$ 66,305**	**$ 58,170**	**$ 63,254**
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[1] Includes carryovers from 2002.

Newfoundland Power Inc.
Capital Budget Expenditures - By Origin
(000s)

Origin	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003F [1]
Plant Replacement	$ 10,290	$ 15,900	$ 13,673	$ 12,815	$ 12,863	$ 17,609	$ 26,441	$ 22,780	$ 23,236	$ 29,980	$ 31,969
	30.4%	45.7%	44.4%	44.5%	41.5%	38.9%	62.5%	53.2%	35.0%	51.5%	50.5%
Customer/Sales Growth	7,999	6,612	5,273	5,812	6,680	6,350	6,124	7,678	9,345	10,510	12,238
	23.6%	19.0%	17.1%	20.2%	21.6%	14.0%	14.5%	17.9%	14.1%	18.1%	19.3%
Information Systems	2,334	790	1,215	2,105	2,775	4,080	3,953	3,754	4,124	5,073	6,399
	6.9%	2.3%	3.9%	7.3%	9.0%	9.0%	9.3%	8.8%	6.2%	8.7%	10.1%
System Additions	2,347	895	1,447	1,201	3,340	13,178	2,440	5,144	4,524	1,088	5,409
	6.9%	2.6%	4.7%	4.2%	10.8%	29.1%	5.8%	12.0%	6.8%	1.9%	8.6%
Aliant Pole Purchase	0	0	0	0	0	0	0	0	21,238	8,088	4,044
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32.0%	13.9%	6.4%
General Expense Capital	10,393	9,718	8,346	6,556	5,014	3,465	2,682	2,678	3,211	2,868	2,800
	30.7%	27.9%	27.1%	22.8%	16.2%	7.7%	6.3%	6.3%	4.8%	4.9%	4.4%
Third Party Requirement	389	765	735	203	217	481	549	719	549	483	295
	1.1%	2.2%	2.4%	0.7%	0.7%	1.1%	1.3%	1.7%	0.8%	0.8%	0.5%
Financial	110	93	93	78	76	82	93	83	78	80	100
	0.3%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.1%	0.1%	0.2%
Total	**$ 33,862**	**$ 34,773**	**$ 30,782**	**$ 28,770**	**$ 30,965**	**$ 45,245**	**$ 42,282**	**$ 42,836**	**$ 66,305**	**$ 58,170**	**$ 63,254**
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[1] Includes carryovers from 2002.

Newfoundland Power Inc.
Capital Budget Summary
1993 – 2003
($000s)

	Approved by Board Order	Actual[1]	Variance Total	Variance (%)
1993	35,180	33,862	(1,318)	(3.7)
1994	39,724	34,773	(4,951)	(12.5)
1995	38,023	30,782	(7,241)	(19.0)
1996	30,958	28,770	(2,188)	(7.1)
1997	33,204	30,965	(2,239)	(6.7)
1998	43,460	45,245	1,785	4.1
1999	41,031	42,282	1,251	3.0
2000	41,771	42,836	1,065	2.5
2001	63,028	66,305	3,277	5.2
2002	57,839	63,698	5,859	10.1
2003	55,715	57,726[2]	2,011	3.6

[1] Actual expenditures reflect the ultimate expenditures pursuant to approvals of the Board given in the year. Carryovers of projects to subsequent years are reflected in year of approval.

[2] Includes 2003 supplementary capital expenditures of $721,000 for which Board approval had not yet been granted at time of filing.

Newfoundland Power Inc.
Capital Expenditure Variance Summary
as of December 31, 1993
(000s)

	Approved By Board Order [1]	Actual	Variance Over (Under)
Energy Supply	$ 2,240	$ 2,115	$ (125)
Substations	3,191	3,104	(87)
Transmission	2,660	2,140	(520)
Distribution	22,826	21,710	(1,116)
General Property	1,156	688	(468)
Transportation	1,175	1,036	(139)
Telecommunications	425	618	193
Computing Equipment	1,507	2,451	944
General Expenses Capital	-	-	-
	$ 35,180	**$ 33,862**	**$ (1,318)**

[1] Order Nos. P.U. 11 (1993), P.U. 1 (1993) and P.U. 2 (1993).

Lower than anticipated customer and sales growth in 1993 was the principle contributing factor for 1993 variances.

Newfoundland Power Inc.
Capital Expenditure Variance Summary
as of December 31, 1994
(000s)

	Approved By Board Order [1]	Actual	Variance Over (Under)
Energy Supply	$ 2,967	$ 2,378	$ (589)
Substations	1,492	1,372	(120)
Transmission	2,801	1,907	(894)
Distribution	24,629	22,527	(2,102)
General Property	2,233	2,352	119
Transportation	3,720	2,616	(1,104)
Telecommunications	900	792	(108)
Computing Equipment	982	829	(153)
General Expenses Capital	-	-	-
	$ 39,724	**$ 34,773**	**$ (4,951)**

[1] Order Nos. P.U. 4 (1993-94), P.U. 1 (1994-95) and P.U. 5 (1994-95).

Energy Supply: The decrease resulted from the cancellation of several projects which, through detailed analysis, proved not to be feasible.

Substations: The decrease resulted from deferral of a power transformer installation due to lower than expected peak low.

Transmission: The decrease resulted from deferral of several projects.

Distribution: The decrease resulted from deferral of a street light conversion project which proved not to be feasible due to high contract labor price. As well, one large distribution extension project was cancelled as the particular mine site was not developed.

General Property: The increase was the result of major storm related damage.

Transportation: The decrease was due to a delay in large vehicle deliveries from 1994 to 1995.

Telecommunications: A project to review alternatives for integration of data circuits was deferred to 1995.

Computing Equipment (Information Systems): The decrease resulted from the deferral of application development projects from 1994 to 1996.

General Expense Capital: This cost was incorporated into other categories.

Newfoundland Power Inc.
Capital Expenditure Variance Summary
as of December 31, 1995
(000s)

	Approved By Board Order [1]	Actual	Variance Over (Under)
Energy Supply	$ 2,049	$ 1,321	$ (728)
Substations	1,416	1,278	(138)
Transmission	2,312	1,790	(522)
Distribution	14,698	11,840	(2,858)
General Property	1,588	1,477	(111)
Transportation	3,175	2,964	(211)
Telecommunications	888	552	(336)
Computing Equipment	1,397	1,214	(183)
General Expenses Capital	10,500	8,346	(2,154)
	$ 38,023	**$ 30,782**	**$ (7,241)**

[1] Order No. P.U. 6 (1994-95).

Energy Supply: The decrease in cost was attributed to a number of projects that were deferred due to contract prices or other issues which made the projects uneconomical.

Substations: The deferral of an additional power transformer at Virginia Waters due to decreased load growth was the primary reason for the decrease in cost.

Transmission: The deferral of several transmission line upgrade projects resulted in the decreased cost.

Distribution: The decrease in this category results mainly from lower than anticipated customer driven work and a decision to defer certain projects to address concerns related to low customer and sales growth.

General Property: The deferral of several projects by making minor repairs instead resulted in actual costs being lower than budget.

Transportation: The decision to defer vehicle purchases to address concerns related to the decline in customer and sales growth resulted in cost reductions.

Telecommunications: The decrease in cost resulted from the deferral of projects due to staffing losses in the Telecommunications Department.

Computing Equipment (Information Systems): The decrease in costs resulted from deferral of several software applications pending further review of requirements.

General Expense Capital: The decrease in this category was a direct result of reductions in total capital budget as a consequence of reductions in other categories.

Newfoundland Power Inc.
Capital Expenditure Variance Summary
as of December 31, 1996
(000s)

	Approved By Board Order [1]	Actual	Variance Over (Under)
Energy Supply	$ 2,360	$ 2,061	$ (299)
Substations	1,224	1,179	(45)
Transmission	1,758	1,634	(124)
Distribution	12,336	11,448	(888)
General Property	1,711	1,584	(127)
Transportation	1,788	1,273	(515)
Telecommunications	943	930	(13)
Computing Equipment	2,340	2,105	(235)
General Expenses Capital	6,498	6,556	58
	$ 30,958	**$ 28,770**	**$ (2,188)**

[1] Order No. P.U. 5 (1995-96).

Energy Supply: The decrease in this category resulted from a deferral in payment for certain projects due to lack of progress on material delivery. As well, design change for certain projects allowed significant cost reduction.

Substations: Minimal variance.

Transmission: The decrease resulted primarily from a deferral of several line relocation projects due to delays in road construction and resolution of litigation issues.

Distribution: The decrease resulted from lower than anticipated customer and sales growth in certain areas, as well as a reduction in the Department of Transportation activity associated with the TCH upgrade and cutbacks in NewTel's fibre cable placement program.

General Property: The decrease in this category resulted from deferral of certain equipment such as the fall arrest equipment which was deferred pending the results of a CEA study.

Transportation: The decrease is the result in a delay in the delivery of several line trucks to 1997.

Telecommunications: Minimal variance.

Computing Equipment (Information Systems): The decrease was the result of a number of projects costing less than the budgeted amount.

General Expenses Capital: Minimal variance.

Newfoundland Power Inc.
Capital Expenditure Variance Summary
as of December 31, 1997
(000s)

	Approved By Board Order [1]	Actual	Variance Over (Under)
Energy Supply	$ 3,726	$ 3,225	$ (501)
Substations	1,992	2,102	110
Transmission	2,008	1,855	(153)
Distribution	12,794	11,580	(1,214)
General Property	2,247	2,213	(34)
Transportation	2,286	1,639	(647)
Telecommunications	1,074	562	(512)
Computing Equipment	2,054	2,775	721
General Expenses Capital	5,023	5,014	(9)
	$ 33,204	**$ 30,965**	**$ (2,239)**

[1] Order No. P.U. 9 (1996-97).

Energy Supply: The decrease in this category resulted from lower than anticipated material cost for certain projects and the cancellation of several others.

Substations: The increase resulted from higher than anticipated cost for insulator replacement projects and the conversion of crown leases to grant project.

Transmission: The decrease resulted from a deferral of a major line relocation project pending resolution of litigation issues.

Distribution: The decrease resulted from cancellation of a meter replacement project and lower than anticipated third party initiated work in the St. John's and Avalon areas.

Transportation: A reassessment of vehicle usage and realignment resulting from an early retirement program for employees allowed the Company to decrease vehicle purchases.

Telecommunications: The decrease resulted from the cancellation of the PBX project after a detailed assessment identified a more cost effective solution.

Computing Equipment (Information Systems): The increase in this category resulted from increased costs associated with the IT migration project and licensing fees for Microsoft Office.

Newfoundland Power Inc.
Capital Expenditure Variance Summary
as of December 31, 1998
(000s)

	Approved By Board Order [1]	Actual	Variance Over (Under)
Energy Supply	$ 13,121	$ 12,888	$ (233)
Substations	2,660	3,029	369
Transmission	2,640	2,425	(215)
Distribution	13,402	15,422	2,020
General Property	2,193	1,294	(899)
Transportation	1,415	1,521	106
Telecommunications	1,173	1,121	(52)
Computing Equipment	3,439	4,080	641
General Expenses Capital	3,417	3,465	48
	$ 43,460	**$ 45,245**	**$ 1,785**

[1] Order Nos. P.U. 15 (1997-98), P.U. 17 (1997-98) and P.U. 17 (1998-99).

Energy Supply: The decrease was due primarily to the deferral of several projects to 1999 due to severe weather conditions in late 1998.

Substations: The increase in costs occurred as a result of additional requirements being identified for several projects when detailed design work commenced.

Transmission: The decrease resulted from a deferral of several projects due to delay in road construction and resolution of litigation issues.

Distribution: Increased transformer replacements due to storm damage and the distribution transformer replacement program resulted in increased costs. As well, there was unforeseen distribution reconstruction required to address storm damage in St. John's.

General Property: The budget for general property included a $750,000 provision for unforeseen expenditures; the actual costs, however, were reported within the appropriate class of assets.

Transportation: The increase cost was the result of new vehicle purchases, planned for 1999, being actually received very late in 1998.

Computing Equipment (Information Systems): The increased cost was associated with the Technical Environment Migration of the Customer Service System. (External contractors were used at a higher level than originally anticipated.) As well, the original budget for the Year 2K project did not include a plan to repair all applications in 1998. However, consistent with most companies, Newfoundland Power decided to accelerate the completion of the project to reduce Year 2K risks.

Newfoundland Power Inc.
Capital Expenditure Variance Summary
as of December 31, 1999
(000s)

	Approved By Board Order [1]	Actual	Variance Over (Under)
Energy Supply	$ 7,710	$ 8,359	$ 649
Substations	2,989	3,529	540
Transmission	2,114	2,149	35
Distribution	16,143	17,171	1,028
General Property	2,876	2,298	(578)
Transportation	1,946	1,797	(149)
Telecommunications	453	344	(109)
Computing Equipment	4,174	3,953	(221)
General Expenses Capital	2,626	2,682	56
	$ 41,031	**$ 42,282**	**$ 1,251**

[1] Order Nos. P.U. 36 (1998-99), P.U. 6 (1999-2000) and P.U. 18 (1990-2000).

Energy Supply: The increase in costs resulted from the carryover of several 1998 projects due to unfavourable weather conditions late in 1998.

Substations: The increase in costs is due to several reasons. One involved the carryover of a project from 1998 that was deferred to a time when the load on the system was lower. The remainder was due to greater than anticipated costs to replace switches, crossarms and insulators.

Distribution: The increased costs resulted from extension projects associated with providing new services being higher than anticipated as well as several unanticipated large extensions to serve new commercial customers and cottage areas.

General Property: The $750,000 allowance for unforeseen items was not required for expenditures in 1999.

Transportation: Actual expenditures were lower than plan as a result of the receipt of new vehicles planned for 1999 in 1998 as well as a delay in the delivery of two line trucks to 2000.

Telecommunications: The decrease was the result of the cancellation of a fibre optic networking project.

Computing Equipment (Information Systems): The decrease was due mainly to reassignment of resources to Year 2K project and partial deferral of Disaster Recovery project.

Newfoundland Power Inc.
Capital Expenditure Variance Summary
as of December 31, 2000
(000s)

	Approved By Board Order [1]	Actual	Variance[2] Over (Under)
Energy Supply	$ 8,878	$ 8,430	$ (448)
Substations	3,500	4,000	500
Transmission	1,526	1,334	(192)
Distribution	16,358	18,928	2,570
General Property	1,585	930	(655)
Transportation	2,390	2,276	(114)
Telecommunications	537	506	(31)
Computing Equipment	4,147	3,754	(393)
General Expenses Capital	2,850	2,678	(172)
	$ 41,771	**$ 42,836**	**$ 1,065**

[1] Order No. P.U. 18 (1999-2000).
[2] Variance details are outlined in the 2000 Capital Expenditure Summary Report filed with the Board on Feb. 28, 2001.

Energy Supply: The decrease is due mainly to lower than anticipated costs to replace the Horse Chops penstock. The difference resulted from lower material cost and reduced labour cost due to the absence of any major complications or unexpected delays in the project.

Substations: The increase was primarily due to the substation site improvement and build new substation (St. Catherine's) projects. The first required significantly more fencing and signage than originally anticipated. Detailed engineering for the second project identified that the original design and location was not technically feasible; unfortunately, the alternative proved to be more costly.

Transmission: The decrease resulted from a deferral of several insulator replacement projects as well as the deferral of the line relocation associated with the construction of the Conception Bay North bypass road.

Distribution: The increase stems primarily from an increase in the number of customer requests for service, some of which required significant extensions. As well, the results of field surveys identified a significant number of transformers that required immediate replacement.

General Property: The $750,000 allowance for unforeseen items was not required for expenditures in 2000.

Transportation: Fewer units than anticipated were replaced in 2000.

Computing Equipment (Information Systems): A project to replace the existing workflow environment was deferred pending further investigation. As well, the Company was able to negotiate a lower than anticipated price for personal computers.

General Expense Capital: This variance reflects a greater portion of internal labour being charged to specific capital projects than originally planned.

Newfoundland Power Inc.
Capital Expenditure Variance Summary
as of December 31, 2001
(000s)

	Approved By Board Order [1]	Actual	Variance[2] Over (Under)
Energy Supply	$ 5,619	$ 5,871	$ 252
Substations	2,863	3,542	679
Transmission	2,419	2,765	346
Distribution	41,586	43,257	1,671
General Property	1,723	944	(779)
Transportation	1,866	2,061	195
Telecommunications	683	530	(153)
Computing Equipment	3,619	4,124	505
General Expenses Capital	2,650	3,211	561
	$ 63,028	**$ 66,305**	**$ 3,277**

[1] Order Nos. P.U. 24 (2000-2001), P.U. 12 (2001-2002) and P.U. 17 (2001-2002).
[2] Variance details are outlined in the 2001 Capital Expenditure Summary Report filed with the Board on March 1, 2002.

Energy Supply: The increase is mainly attributable to unanticipated costs associated with the Sandy Brook runner upgrade and the System Control Centre SCADA projects.

Substations: The variance in this category is primarily the result of increased scope associated with the Rebuild Substation project that was identified during the detailed engineering phase.

Transmission: The variance in this category resulted from a detailed analysis which identified that the length of line requiring upgrade was more extensive than originally anticipated, as well as an unanticipated request from the Department of Works to relocate sections of three transmission lines.

Distribution: Extensions and services associated with providing electricity to new customers increased as a result of more residential customers than anticipated as well as several unanticipated large extensions to service new commercial customers and cottage areas.

General Property: The $750,000 allowance for unforeseen items was not required for expenditures in 2001.

Transportation: The increase resulted from a decision to upgrade the specifications for two line trucks from light duty to heavy duty to obtain a better match between the truck and work requirements.

Telecommunications: The decrease resulted from a delay in the Telephone Circuit Protection project due to other work commitment by Aliant Inc.

Computing Equipment (Information Systems): The increase resulted from greater than anticipated modification to the Business Support System, as well as an increase in the work in progress associated with the Facilities Management and Operations Support Systems.

General Expense Capital: The increase in this category was due to increased effort associated with the 2001 capital budget as well as increased expenditure associated with vacation, payroll and material overhead.

Newfoundland Power Inc.
Capital Expenditure Variance Summary
as of December 31, 2002
(000s)

	Approved By Board Order [1]	Actual	Variance[2] Over (Under)
Energy Supply	$ 7,523	$ 7,520	$ (3)
Substations	7,347	5,986	(1,361)
Transmission	2,861	3,089	228
Distribution	27,188	30,966	3,778
General Property	1,420	715	(705)
Transportation	2,200	1,609	(591)
Telecommunications	502	343	(159)
Computing Equipment	6,298	5,074	(1,224)
General Expenses Capital	2,500	2,868	368
	$ 57,839	**$ 58,170**	**$ 331**
Carried Over to 2003	-	5,528	5,528
Adjusted for carryover to 2003	**$ 57,839**	**$ 63,698**	**$ 5,859**

[1] Order Nos. P.U. 21 (2001-2002) and P.U. 15 (2002-2003).
[2] Variance details are outlined in the 2002 Capital Expenditure Summary Report filed with the Board on Feb. 28, 2003.

Substations: The Salt Pond power transformer was budgeted for 2002; however, it could not be delivered until 2003. The positive variance associated with this was somewhat offset by increased costs associated with the Gander substation rebuild and the modifications at Wesleyville to accommodate the Gas turbine relocation.

Transmission: The increased costs in this category are associated with projects required in connection with re-establishing proper vertical clearances for transmission lines 100L, 124L and 146L.

Distribution: Extension projects associated with providing service to new customers cost more than anticipated due to the increase in the number of new residential customers being above forecast, as well as several unanticipated large extensions to service new commercial customers and cottage areas.

Reconstruction projects and transformer purchases also exceeded budget due mainly to lightening storms that were experienced throughout 2002.

General Property: The $750,000 allowance for unforeseen items was not required for expenditures in 2002.

Transportation: The decrease in this category was due to a delay in receiving the heavy vehicle order for 2002.

Telecommunications: The decrease in this category was due to a delay in the construction of fiber optic links planned for 2002.

Computing Equipment (Information Systems): The decrease in this category was due to a delay in the completion of the facilities management system to allow additional time to identify process improvements for inclusion in the system. As well there was a reduction and delay in the operating support system to determine if the facilities management system and the business support system could be used to address some of the requirements for that project.

General Expense Capital: The increase in this category was due to increased effort associated with the 2002 capital budget as well as increased expenditure associated with vacation, payroll and material overhead.

Newfoundland Power Inc.
Capital Expenditure Variance Summary
as of December 31, 2003
(000s)

	Approved By Board Order [1]	Forecast	Variance[2] Over (Under)
Energy Supply	$ 7,076	$ 7,429	$ 353
Substations	5.887	5,820	(67)
Transmission	4,129	4,291	162
Distribution	26,132	27,614	1,482
General Property	910	1,047	137
Transportation	2,141	2,328	187
Telecommunications	383	294	(89)
Computing Equipment	5,507	5,728	221
General Expenses Capital	2,800	2,800	0
Unforeseen Items	750	375	(375)
	$ 55,715	**$ 57,726**	**$ 2,011**
Carried Over from 2002	-	5,528	5,528
Adjusted for carryover from 2002	**$ 55,715**	**$ 63,254**	**$ 7,539**

[1] Order Nos. P.U. 36 (2002-2003), P.U. 19 (2003).
[2] Variance details are contained in 2003 Capital Expenditure Status Report which is filed with the 2004 Capital Budget Application

Newfoundland Power Inc.
Capital Budget Plan
($000s)

Category	**2004**	**2005**	**2006**	**2007**	**2008**
Energy Supply	$6,945	$4,429	$12,627	$5,382	$4,860
Substations	5,199	5,686	5,890	6,456	7,586
Transmission	2,315	6,899	5,592	6,231	6,195
Distribution	27,636	25,788	21,150	20,758	19,372
General Property	709	1,180	1,043	970	960
Transportation	3,487	2,831	2,354	2,283	2,408
Telecommunications	120	424	170	370	550
Information Systems	3,948	3,750	3,595	3,460	3,640
Unforeseen Items	750	750	750	750	750
General Expense Capital	2,800	2,800	2,800	2,800	2,800
Total	**$53,909**	**$54,537**	**$55,971**	**$49,460**	**$49,121**

Newfoundland Power Inc.
2004 Capital Budget Plan
($000s)

ENERGY SUPPLY

Project	**2004**	**2005**	**2006**	**2007**	**2008**
Hydro Plants Facility Rehabilitation	$1,122	$3,013	$1,503	$4,092	$2,843
Hydro Plant – Penstock, & Pivot Valve Replacement	3,973	466	9,291	1,140	1,867
Purchase Portable Diesel Generation	1,700	0	0	0	0
Major Electrical Equipment Repairs	150	150	150	150	150
Thermal Plants Facility Rehabilitation	0	800	0	0	0
Hydro Plant – Surge Tank Replacement	0	0	1,683	0	0
Total - Energy Supply	**$6,945**	**$4,429**	**$12,627**	**$5,382**	**$4,860**

Newfoundland Power Inc.
2004 Capital Budget Plan
($000s)

SUBSTATIONS

Project	**2004**	**2005**	**2006**	**2007**	**2008**
Rebuild Substations	$1,023	$550	$493	$1,436	$1,687
Replacement & Standby Substation Equipment	1,314	2,146	2,136	3,225	2,704
Transformer Cooling Refurbishment	398	250	250	250	250
Protection & Monitoring Improvements	80	45	45	45	45
Distribution System Feeder Remote Control	1,000	1,000	1,500	1,500	1,500
Feeder and Transformer Additions due to Growth and Reliability	1,384	344	1,466	0	1,400
New Line – Old Perlican to Victoria	0	1,351	0	0	0
Total – Substations	**$5,199**	**$5,686**	**$5,890**	**$6,456**	**$7,586**

Newfoundland Power Inc.
2004 Capital Budget Plan
($000s)

TRANSMISSION

Project	**2004**	**2005**	**2006**	**2007**	**2008**
Rebuilt Transmission Lines	$2,315	$3,101	$5,592	$6,231	$6,195
New Line – Old Perlican to Victoria	0	3,798	0	0	0
Total – Transmission	**$2,315**	**$6,899**	**$5,592**	**$6,231**	**$6,195**

Newfoundland Power Inc.
2004 Capital Budget Plan
($000s)

DISTRIBUTION

Project	**2004**	**2005**	**2006**	**2007**	**2008**
Extensions	$4,956	$4,680	$4,030	$3,696	$3,489
Meters	1,174	699	594	631	764
Services	1,946	2,099	1,754	1,724	1,755
Street Lighting	1,242	1,091	1,148	1,018	1,031
Transformers	4,965	4,600	4,400	4,250	4,110
Reconstruction	2,461	2,644	2,592	2,584	2,359
Aliant Pole Purchase	4,044	4,044	0	0	0
Trunk Feeders					
Rebuild Distribution Lines	4,137	4,051	5,037	5,505	4,704
Relocate/Replace Distribution Lines For Third Parties	235	235	235	235	235
Distribution Reliability Initiative	949	1,315	900	750	750
Feeder Additions and Upgrades to Accommodate Growth	677	230	360	265	75
Switch Replacement & Upgrade Underground Distribution – Water Street, St. John's	750	0	0	0	0
Interest During Construction	100	100	100	100	100
Total – Distribution	**$27,636**	**$25,788**	**$21,150**	**$20,758**	**$19,372**

Newfoundland Power Inc.
2004 Capital Budget Plan
($000s)

GENERAL PROPERTY

Project	**2004**	**2005**	**2006**	**2007**	**2008**
Tools and Equipment	$535	$518	$425	$350	$350
Additions to Real Property	174	662	618	620	610
Total – General Property	**$709**	**$1,180**	**$1,043**	**$970**	**$960**

Newfoundland Power Inc.
2004 Capital Budget Plan
($000s)

TRANSPORTATION

Project	**2004**	**2005**	**2006**	**2007**	**2008**
Purchase Vehicles and Aerial Devices	$3,487	$2,831	$2,354	$2,283	$2,408
Total – Transportation	**$3,487**	**$2,831**	**$2,354**	**$2,283**	**$2,408**

Newfoundland Power Inc.
2004 Capital Budget Plan
($000s)

TELECOMMUNICATIONS

Project	**2004**	**2005**	**2006**	**2007**	**2008**
Replace/Upgrade Communications Equipment	$70	$70	$75	$46	$160
Substation Telephone Circuit Protection	50	90	95	99	103
Fibre Optic Networking	0	264	0	225	287
Total – Telecommunications	**$120**	**$424**	**$170**	**$370**	**$550**

Newfoundland Power Inc.
2004 Capital Budget Plan
($000s)

INFORMATION SYSTEMS

Project	**2004**	**2005**	**2006**	**2007**	**2008**
Application Enhancements	$1,355	$1,390	$1,375	$1,075	$950
Application Environment	791	410	700	860	1,060
Customer Systems Replacement	226	250	170	175	175
Network Infrastructure	393	250	50	50	50
Personal Computer Infrastructure	539	550	550	550	555
Shared Server Infrastructure	644	900	750	750	850
Total – Information Systems	**$3,948**	**$3,750**	**$3,595**	**$3,460**	**$3,640**

Newfoundland Power Inc.
2004 Capital Budget Plan
($000s)

UNFORESEEN ITEMS

Project	**2004**	**2005**	**2006**	**2007**	**2008**
Allowance for Unforeseen Items	$750	$750	$750	$750	$750
Total – Unforeseen	**$750**	**$750**	**$750**	**$750**	**$750**

Newfoundland Power Inc.
2004 Capital Budget Plan
($000s)

GENERAL EXPENSE CAPITAL

Project	**2004**	**2005**	**2006**	**2007**	**2008**
Allowance for General Expense Capital	$2,800	$2,800	$2,800	$2,800	$2,800
Total – General Expense Capital	**$2,800**	**$2,800**	**$2,800**	**$2,800**	**$2,800**

Changes in Deferred Charges
2003 – 2004

NEWFOUNDLAND POWER
A FORTIS COMPANY

Introduction

In Order No. P.U. 19 (2003), the Board ordered Newfoundland Power (the "Company") to incorporate deferred charges in rate base commencing in 2003. In addition, the Board ordered that evidence relating to changes in deferred charges, in particular deferred pension costs, be filed annually with the Company's capital budget application.

The purpose of this report is to provide the evidence on changes in deferred charges ordered by the Board to be filed with the Company's 2004 capital budget.

Deferred Charges

Table 1 sets out the actual deferred charges for 2002 and forecast deferred charges for 2003 and 2004.

Table 1
Deferred Charges: 2002-2004F
($000s)

	Actual	Forecast	
	2002	**2003**	**2004**
Weather Normalization Account	10,919	9,705	8,579
Deferred Regulatory Costs & Other	16	816	416
Unamortized Debt Discount & Expense	3,490	3,290	3,092
Unamortized Capital Stock Issue Expense	458	392	325
Deferred Pension Costs	64,684	72,794	79,780
Total Deferred Charges	**79,567**	**86,997**	**92,192**

The forecast for deferred charges is consistent with that filed in the Company's 2003 General Rate Application, except for the Weather Normalization Account which has changed marginally due to the routine operation of this account up to May 31, 2003.

There are no changes in the forecast for Deferred Regulatory Costs & Other, Unamortized Debt Discount & Expense, Unamortized Capital Stock Issue Expense or Deferred Pension Cost from that presented in the Company's 2003 General Rate Application.

Weather Normalization Account

The Weather Normalization Account has been historically included as a component of rate base and as such the treatment of the Weather Normalization Account is unchanged by the inclusion of certain deferred charges in rate base as ordered by the Board in Order No. P.U. 19 (2003).

The balance in the Weather Normalization Account is comprised of two reserve accounts as described in Table 2.

Table 2
Weather Normalization Account: 2002-2004F
($000s)

	2002	2003F	Change 2003F vs. 2002	2004F	Change 2004F vs. 2003F
Hydro Production Equalization Reserve	9,551	8,467	(1,084)	7,341	(1,126)
Degree Day Normalization Reserve	1,368	1,238	(130)	1,238	0
Total	10,919	9,705	(1,214)	8,579	(1,126)

The functioning of these reserves is governed by Order No. P.U. 32 (1968) in the case of the Hydro Production Equalization Reserve and Order No. P.U. 1 (1974) in the case of the Degree Day Normalization Reserve. The combined balances in the Weather Normalization Account are provided annually to the Board in Return 14 for review and approval by the Board. Order No. P.U. 22 (2003) approved the balance in the Weather Normalization Account as of December 31, 2002.

In Order No. P.U. 19 (2003) the Board accepted Newfoundland Power's proposal to amortize the recovery of the $5.6 million non-reversing balance in the Hydro Production Equalization Reserve over a period of five years. The reduction in the Hydro Production Equalization Reserve of $1,126,000 in 2003 and 2004 is reflective of that amortization. The remaining change in the Hydro Production Equalization Reserve in 2003 relates to the actual operation of the reserve.

Both the Hydro Production Equalization Reserve and the Degree Day Normalization Reserve are affected by actual weather patterns compared to 'normal' weather patterns. As noted above, the difference between 'normal' weather and that actually experienced to the end of May 2003 has been reflected in the revised 2003 forecast.

Deferred Regulatory Costs & Other

The increase in deferred regulatory costs in 2003 and the subsequent decrease in 2004 reflects the incurrence of $1.2 million of hearing costs and their subsequent amortization over three years beginning in 2003 in accordance with Order No. P.U.19 (2003). This is set out in Table 3.

Table 3
Deferred Regulatory Costs: 2002-2004F
($000s)

	2002	2003F	Change 2003F vs. 2002	2004F	Change 2004F vs. 2003F
Deferred Regulatory Costs & Other	$16	816	$800	416	($400)

Unamortized Debt Discount and Capital Stock Issue Expenses

Changes in unamortized debt discount and capital stock issue expenses are set out in Table 4.

Table 4
Capital Issue Expenses: 2002-2004F
($000s)

	2002	2003F	Change 2003F vs. 2002	2004F	Change 2004F vs. 2003F
Unamortized Debt Discount & Expense	3,490	3,290	(200)	3,092	(198)
Unamortized Capital Stock Issue Expense	458	392	(66)	325	(67)

The decline in the Unamortized Debt Discount & Expense each year reflects the normal amortization of these costs over the life of each debt issue.

The decline in the Unamortized Capital Stock Issue Expense each year reflects the normal amortization of these costs over a 20-year period.

Deferred Pension Costs

The difference between *pension plan funding* and *pension plan expense* is captured as a *deferred pension cost* on the balance sheet in accordance with Order No. P.U.17 (1987).

Deferred pension costs are currently unchanged from that forecast in the Company's 2003 General Rate Application, and forecast 2003 – 2004 costs are set out in Table 5.

Table 5
Forecast Deferred Pension Costs: 2003-2004
($000s)

	2003F	2004F
Deferred pension costs, January 1st	64,684	72,794
Pension plan funding		
- Current service funding	3,350	3,501
- Special funding	7,589	6,384
Total pension plan funding	10,939	9,885
Pension plan expense	(2,829)	(2,899)
Increase in deferred pension costs	8,110	6,986
Deferred pension costs, December 31st	72,794	79,780

Pension plan funding is comprised of two components: current service funding which is determined by an independent actuary and is related to service rendered by active employees in the current year; and, special funding which are additional pension funding requirements to address increases in the unfunded liability in the pension plan since its inception. The status of the unfunded liability or surplus is determined each time an actuarial study is completed. Under pension legislation, this has to occur at least once every three years.

The Company calculates annual pension expense in accordance with recommendations of the Canadian Institute of Chartered Accountants ("CICA") and relevant Board orders, the most recent of which is Order No. P.U. 19 (2003).

The forecasting of pension plan funding and pension plan expense beyond 2003 is subject to changes based upon the following factors:

1. An actuarial valuation must be prepared and filed with pension regulators in 2004. Based on this valuation, the actuary will determine the appropriate current service funding for 2004 and the total unfunded pension liability.

2. The final pension plan expense for 2004 can only be determined early in 2004 once actual pension plan asset balances are known. This determination is made based on the December 31, 2003 market value of pension plan assets in accordance with CICA Handbook recommendations.

3. The discount rate that is required to be used under the CICA Handbook rules to calculate 2004 pension expense is the actual market rate of interest at December 31, 2003.

While pension plan funding and pension plan expense for 2004 is subject to change from the forecast provided above, both will be determined based on standards that have been consistently applied year over year, and which are in compliance with CICA recommendations, actuarial principles, and Board orders.

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

IN THE MATTER OF capital expenditures and rate base of Newfoundland Power Inc.; and

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

(a) approving its 2004 Capital Budget of $53,909,000; and
(b) fixing and determining its average rate base for 2002 in the amount of $573,337,000.

Prefiled Evidence of
Earl Ludlow and Phonse Delaney

NEWFOUNDLAND POWER
A FORTIS COMPANY

At the hearing into Newfoundland Power's 2004 Capital Budget Application, the following evidence will be adopted by Earl Ludlow, P. Eng., Vice President, Engineering & Operations of Newfoundland Power and Phonse Delaney, P. Eng., Manager Western Region, with Newfoundland Power.

A Witness profile for Earl Ludlow and Phonse Delaney follow.

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 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 the Board of Regents of Memorial University. He also serves on the Engineering and Applied Science Advisory Council and is Chair of the Faculty Development Subcommittee.

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.

Phonse Delaney, P. Eng.
Manager, Western Region
Newfoundland Power Inc.

Phonse Delaney joined Newfoundland Power in 1987 as an Electrical Engineer.

Until 1999, Mr. Delaney served Newfoundland Power in a variety of operations and engineering capacities throughout the Company. Mr. Delaney has held the positions of Electrical Engineer - Stephenville, Planning Engineer - Head Office, Regional Planning Engineer - St. John's, Superintendent of Operations - Burin, Superintendent of Engineering and Operations - Clarenville, Senior Operations Engineer - Head Office, Superintendent of Regional Engineering - St. John's.

In 1999, Mr. Delaney was appointed Manager, Avalon Region. With the reorganization of regional operations in 2001, Mr. Delaney moved to Manager, Western Region.

Mr. Delaney is responsible for the engineering, operation and maintenance of Newfoundland Power's electrical infrastructure in the Western Region and has corporate responsibilities for Automation, Telecommunications and Joint-Use.

Mr. Delaney is a graduate of Memorial University (B.Eng. (Elec.) 1986) and is a member of the Association of Professional Engineers and Geoscientists of Newfoundland.

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SUMMARY OF EVIDENCE

Newfoundland Power's 2004 proposed capital expenditures total $53,909,000. Approximately 56% of the proposed budget is allocated to replace deteriorated plant and equipment and approximately 22% is proposed to be spent to serve new customers and respond to third party requests.

Newfoundland Power's *2004 Capital Budget Plan* anticipates average annual capital expenditures of approximately $52 million over the period 2004 through 2008. Replacement of deteriorated defective or obsolete electrical equipment is forecast to account for approximately 60% of total expenditures through this period.

Newfoundland Power is currently forecasting that its 2003 capital expenditures will exceed the approved budget by 3.6%.

1. CAPITAL PLANNING

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

1.1 Planning Generally

Newfoundland Power's capital planning is a deliberate effort to balance customer needs, reliability, productivity, safety and environmental needs with prudent capital expenditures.

Planning begins with the customer and energy forecasts. These forecasts predict 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 in gigawatt-hours ("GWh"), along with the maximum demand in mega-volt amperes ("MVA") for each substation for the previous year, is used to determine load growth related expenditures in the Distribution, Substations and Transmission categories.

For all budget categories, projects are developed that reflect reliability, safety, customer service, environmental, and productivity requirements. The projects are identified either through visual and infrared thermoscan inspections, or through reviews of system reliability and equipment performance. During budget consultations, these budget items are reviewed, modified and prioritized, and an appropriate capital budget is proposed. This budget is presented to the Company's Board of Directors for corporate approval, and then to this Board for regulatory approval.

Annual capital expenditures are routinely reviewed to ensure that the circumstances and projections on which the capital plans were based have not changed. Should circumstances change, expenditures that are no longer required are cancelled or deferred and, when necessary, supplementary regulatory approval is sought for unforeseen requirements.

1.2 2004 Capital Budget Plan

In accordance with Order No. P.U. 36 (2002-2003) the Company has submitted a 2004 *Capital Budget Plan* (the "Plan") with the Application.

The Plan outlines a five year forecast for capital expenditures. The Company anticipates investing approximately $260 million in plant and equipment during the 2004 to 2008 period. The capital investment pattern outlined in the Plan is stable with an average annual budget throughout the 2004 to 2008 period of approximately $52 million. Consistent with the past five years, replacement of deteriorated, defective and obsolete electrical equipment will continue to dominate capital projects and account for approximately 60% of total expenditures or about $30 million per year. This amount is approximately the same as the depreciation expense incurred each year by the Company.

The Plan is based on a prioritized list of projects that are expected to be completed during the five year period. However, circumstances may change and as a result, priorities and levels of capital expenditures may also change.

For example, the Company is currently aware of a proposed mine site development in central Newfoundland that could result in transmission line expenditures in excess of $5,000,000 in 2005 and 2006. However, due to the uncertainty of this venture proceeding, expenditures are not included in the five year forecast.

2. 2004 CAPITAL BUDGET OVERVIEW

This section of the evidence provides an overview of the principal drivers behind Newfoundland Power's 2004 capital budget expenditures.

Schedule A to the Application, provides a summary of Newfoundland Power's 2004 proposed capital expenditures, which total $53,909,000, including general expenses capitalized. The justifications for the proposed 2004 capital expenditures are found in Schedule B to the Application.

Newfoundland Power has an obligation to serve new and existing customers in its service territory with a reliable electricity supply, consistent with reasonable cost. This is accomplished through capital expenditures to accommodate new customer and energy growth and third party requests, replacement of deteriorated equipment, additions to improve operating efficiency, and investments in information systems directed towards improving and maintaining overall productivity.

In 2004, approximately $12.0 million, or 22% of the budget, is proposed to be spent to serve new customers and third party requests; $30.1 million, or 56% of the budget, is allocated to replace deteriorated plant and equipment; $4.0 million, or 7% of the budget, relates to the Aliant pole purchase; and $3.9 million, or 7%, is proposed to be spent on

information systems. The remaining $3.6 million is allocated to General Expenses Capital, Unforeseen Items, plant additions and Interest During Construction for small Distribution projects.

3. 2004 CAPITAL BUDGET SUMMARY BY BUDGET CATEGORY

This section of the evidence provides a summary of the principal proposed 2004 expenditures in each of the Energy Supply, Substations, Transmission, Distribution, General Property, Transportation, Telecommunication and Allowance for Unforeseen Items categories.

3.1 Energy Supply

Proposed Energy Supply expenditures in the 2004 capital budget are $6,945,000, or approximately 13% of the total budget. Details can be found at pages 10 to 17 of Schedule B to the Application.

Table 1 contains a summary of the proposed Energy Supply expenditures.

Table 1
2004 Capital Budget
Energy Supply
($000s)

Hydro Plant Facility Rehabilitation	$1,122,000
New Chelsea – Hydro Plant Refurbishment	3,973,000
Purchase Portable Diesel Generation	1,700,000
Major Electrical Equipment Repairs	150,000
	$6,945,000

Nine of the Company's 23 hydro plants will see rehabilitation work at a cost of $1,122,000 in 2004. 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 over 700,000 barrels of oil. 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.

A major project proposed in the 2004 capital budget involves refurbishment of equipment and the replacement of the deteriorated penstock at the New Chelsea plant in Trinity Bay at a cost of $3,973,000.

The 2.5 MW portable diesel generator proposed to be acquired at a cost of $1,700,000 will replace capacity that was lost when two existing portable generators and the St. John's diesel generator are decommissioned in 2003. In the winter, Newfoundland Power will station the new generation unit in Trepassey, which is 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 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.

3.2 Substations

Proposed Substations expenditures in the 2004 capital budget are $5,199,000 or approximately 10% of the total budget. Details can be found at pages 18 to 31 of Schedule B to the Application.

Table 2 contains a summary of the proposed Substations expenditures.

Table 2
2004 Capital Budget
Substations
($000s)

Rebuild Substations	$1,023,000
Replacement and Spare Substation Equipment	1,314,000
Transformer Cooling Refurbishment	398,000
Protection and Monitoring Improvements	80,000
Distribution System – Feeder Remote Control	1,000,000
Feeder Additions Due to Load Growth	200,000
Increase Corner Brook Transformer Capacity	1,184,000
	$5,199,000

The Rebuild Substations project includes the refurbishment or replacement of structures at 12 substations. The largest project, in the amount of $217,000, involves the replacement of 138 kV switches at the Port Blandford Substation. The work at these substations is required to maintain the reliability and continuity of service to customers and to eliminate potential safety hazards to employees.

In 2002, the Company initiated a program to replace a number of aging, limited function, electromechanical relays and oil-filled reclosers. By the end of 2003, over 40 relays and 30 reclosers will have been replaced. In 2004, approximately $1,000,000 is proposed to be spent to install 25 new relays and 6 new reclosers which can be remotely controlled by the System Control center. This will provide improved reliability to the customers serviced by the feeders involved in these changes.

The largest project in the Substations category relates to an increase in transformer capacity in the Corner Brook area. The project envisages installation of a new 25 MVA transformer at Walbournes Substation as a replacement for an existing 15 MVA unit, and then moving the existing 15 MVA transformer at Walbournes Substation to the Bayview Substation. This project is budgeted at a cost of $1,184,000, and is necessary to provide capacity to the system which is forecasted to be at 100% loading in the 2003/2004 winter season.

3.3 Transmission

Proposed Transmission expenditures in the 2004 capital budget are $2,315,000 or approximately 4% of the total budget. The proposed $2,315,000 expenditure will be used to rebuild transmission lines. Details can be found at pages 32 to 33 of Schedule B to the Application.

The Rebuild Transmission Lines project includes the proposed refurbishment of lines at a number of locations, eight of which are estimated to be in excess of $50,000 each. The

project includes replacement of poles, crossarms, conductor, pin type and suspension insulators and other miscellaneous hardware. Two of the larger refurbishments included in these expenditures are $364,000 to rebuild a 4.7 km section of transmission line 3L from Goulds to Petty Harbour and $380,000 to rebuild a 5.1 km section of 403L from St. Georges to Lookout Brook. These expenditures are necessary to ensure the continued reliability of the Company's transmission lines.

3.4 Distribution

Proposed Distribution expenditures in the 2004 capital budget are $27,636,000 or approximately 51% of the total budget. Details can be found at pages 34 to 58 of Schedule B to the Application.

Table 3 contains a summary of the proposed Distribution expenditures.

Table 3
2004 Capital Budget
Distribution
($000s)

Extensions	$4,956,000
Meters	1,174,000
Services	1,946,000
Street Lighting	1,242,000
Transformers	4,965,000
Reconstruction	2,461,000
Aliant Pole Purchase	4,044,000
Trunk Feeders	6,748,000
Interest During Construction	100,000
	$27,636,000

The proposed expenditures for extensions, services, street lighting and transformers are primarily influenced by growth in the number of customers served by the Company. Budgeted expenditure levels are determined with reference to the Company's forecast of new customers using historical expenditures as a guide. In addition to the requirements for customer growth, the transformer account also includes units that are necessary to replace rusty or deteriorated units that have been identified through field inspections.

The expenditures for reconstruction are primarily focused on maintaining reliability and safety.

Proposed trunk feeder expenditures of approximately $6.7 million include large projects such as the distribution reliability initiative, the rebuild distribution line projects and the Water Street Underground Switch Replacement Project. The proposed expenditures are also primarily focused on reliability. In 2004, the distribution reliability initiative provides approximately $950,000 in capital expenditures for the New Wes Valley, Port de Grave and Torbay areas. The rebuild distribution line initiative provides approximately $4.1 million to perform refurbishment and replacement of structures and equipment on approximately 20% of the Company's 300 distribution feeders. Capital expenditures of $750,000 are provided to complete the Water Street Underground Switch Replacement Project which commenced five years ago.

Approximately $235,000 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 is recovered from the parties making the requests.

3.5 General Property

Proposed General Property expenditures in the 2004 capital budget are $709,000 or just over 1% of the total budget. Details can be found at pages 59 to 61 of Schedule B to the Application.

Table 4 contains a summary of the proposed General Property expenditures.

Table 4
2004 Capital Budget
General Property
($000s)

Tools and Equipment	$535,000
Additions to Real Property	174,000
	$709,000

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.

3.6 Transportation

Proposed Transportation expenditures in the 2004 capital budget are $3,487,000 or approximately 6% of the total budget. Details can be found at pages 62 to 63 of Schedule B to the Application.

There are a number of factors that influence the purchase of new vehicles including kilometres travelled, vehicle condition, operating experience and projected operating expenditures.

In 2004, 36 units will be purchased, consisting of 15 passenger, 9 off-road, and 12 heavy fleet vehicles.

3.7 Telecommunications

Proposed Telecommunications expenditures in the 2004 capital budget are $120,000. Details can be found at pages 64 to 67 of Schedule B to the Application.

Table 5 contains a summary of the proposed Telecommunications expenditures.

Table 5
2004 Capital Budget
Telecommunications
($000s)

Replace/Upgrade Communications Equipment	$70,000
Substation Telephone Circuit Protection	50,000
	$120,000

3.8 Allowance for Unforeseen Items

This account is required to permit the Company to act expediously to deal with unexpected events affecting the electrical system for which funds have not been specifically budgeted.

In previous capital budget applications the Allowance for Unforeseen Items was included under the General Property category. In Order No. P.U. 36 (2002-2003) the Board directed Newfoundland Power to report budget, actual and forecast capital expenditures for Unforeseen Items separately.

The Allowance for Unforeseen Items in the 2004 Capital Budget is $750,000. Details can be found at page 80 of Schedule B to the Application.

4. 2003 CAPITAL EXPENDITURES

This section of the evidence provides an overview of variances from budgeted 2003 capital expenditures.

The approved 2003 capital budget, as well as the forecast of 2003 capital expenditures and resulting variances, is set out in detail, in the report entitled *2003 Capital Expenditure Status Report,* which is filed with the Company's 2004 Capital Budget 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 an 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.

The Distribution category is the largest component of the capital budget, and the number of individual variances is generally greatest in this area. In 2003, the demands placed on the Company for large service extensions to such locations at the Pitcher's Pond Golf Course, the Cow Head industrial site and the Argentia Management Authority, as well as increased costs associated with certain reliability rebuild projects, resulted in increased expenditures of approximately $1.5 million.

Variances from initial cost estimates can also be caused by changes in the cost of materials and labour, or by unanticipated requirements associated with a project. For example, in Energy Supply, a project to refurbish the protection and controls on the mobile gas turbine was expanded to include refurbishment of the actual gas generator when detailed analysis identified the need for such work.

Capital expenditure variances may also result from changed circumstances revealed in ongoing reviews and reassessments of capital projects. For example, as a result of a review of certain substation projects, the requirements were reduced, and one project was deferred to 2004 due to the additional work associated with 2002 carryover projects.

Capital expenditures on Information Technology are forecasted to be $5,728,000 representing a variance of $221,000 over the initial budget of $5,507,000. The majority of this increase is associated with the cost of hardware and external resources necessary to upgrade the Unix operating system and application software associated with the System Control and Data Acquisition ("SCADA") system.

Overall, the Company is currently forecasting that its 2003 capital expenditures will exceed the approved budget by 3.6%.

The Company is always mindful of the possibility of changes in conditions and circumstances, and it 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 or safety, the capital program will be adjusted accordingly. In the case of significant changes, the Company will seek approval of this Board.

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

IN THE MATTER OF capital expenditures and rate base of Newfoundland Power Inc.; and

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

(a) approving its 2004 Capital Budget of $53,909,000; and
(b) fixing and determining its average rate base for 2002 in the amount of $573,337,000.

Prefiled Evidence of

Michael Mulcahy and Peter Collins

NEWFOUNDLAND POWER
A FORTIS COMPANY

At the hearing into Newfoundland Power's 2004 Capital Budget Application, the following Evidence will be adopted by Michael Mulcahy, Vice President, Customer and Corporate Services of Newfoundland Power and Peter Collins, Manager, Information Services of Newfoundland Power.

A Witness profile for Michael Mulcahy and Peter Collins follow.

Michael Mulcahy
Vice President, Customer & Corporate Services
Newfoundland Power Inc.

Michael Mulcahy joined Newfoundland Power in 2003 as Vice-President, Customer and Corporate Services.

Prior to 2003, Mr. Mulcahy was Vice-President, Hospitality Services with Fortis Properties Corporation, St. John's, Newfoundland and Labrador. From 1993 to 1996, Mr. Mulcahy served as Manager, Human Resources of Maritime Electric Company, Limited. Prior to joining Maritime Electric Company, Limited, Mr. Mulcahy held a variety of positions with Moosehead Breweries Limited in Dartmouth, Nova Scotia.

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

Mr. Mulcahy is a graduate of Dalhousie University (Bachelor of Commerce).

Peter Collins
Manager, Information Systems
Newfoundland Power Inc.

Peter 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 joined Newfoundland Power in 1986 as a Programmer Analyst and has served in progressively senior technology positions within the Company since that time.

Mr. Collins testified before the Board of Commissioners of Public Utilities of Newfoundland and Labrador during the Company's 2002 and 2003 Capital Budget hearing on matters relating to information technology capital expenditures.

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

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SUMMARY OF EVIDENCE

Information technology plays an integral part in the provision of least cost, reliable and efficient service to Newfoundland Power's customers. It is at the core of the Company's interaction with its customers and is central to the maintenance and improvement of the Company's operating efficiency.

The strategic direction of information technology investment at Newfoundland Power has not changed materially since 1999. The Company will continue to focus its information technology investment in areas which improve customer service or operating efficiency.

The Company's Customer Service System is a critical computer application. It is the most prominent technology obsolescence issue currently facing Newfoundland Power. It is currently expected to remain in service until at least 2008.

Newfoundland Power's proposed 2004 capital budget for Information Systems is approximately $3.9 million or 7% of the Company's total capital budget.

1. INFORMATION TECHNOLOGY AT NEWFOUNDLAND POWER

This section of the evidence outlines the integral role played by information technology in the least cost provision of service by Newfoundland Power.

Information technology ("IT") is at the core of Newfoundland Power's interaction with its customers. IT plays an integral part in the provision of least cost, reliable and efficient service to Newfoundland Power's customers.

Most of the Company's interaction with its customers involves the use of IT. Agents in the Customer Contact Centre respond to customer inquiries using computer applications such as the outage system, the street light system, the meter system, and the intranet system. These applications reside on the Company's servers and network and are integrated with the Customer Service System ("CSS"), which contains virtually all of the information required to serve the Company's 220,000 customers.

Technology provides customers with flexibility in how they choose to interact with the Company. Using a telephone, customers can retrieve information about their billing account using the Company's call centre technology. Customers with access to the Internet can also retrieve account information, open and close their accounts, view their electrical consumption history, or join a payment plan without having to speak to an agent. These service options provide improvements in customer service while allowing the Company to reduce operating costs.

IT also contributes to the provision of reliable electrical service to customers. The increase in the use of technology in the electrical distribution system contributes to improved reliability. When a power outage occurs, the System Control Centre ("SCC"), through the technology installed in specific areas of the electrical distribution system, is notified immediately. Using IT, the SCC can, in many cases, remotely operate the distribution system to restore power. This responsiveness improves reliability and contributes to public and employee safety.

Properly maintained electrical assets are important for the provision of reliable electrical service to customers, particularly on a mature system. Using asset management technology, the Company is able to track its inspection and maintenance activities on its critical assets. These maintenance activities help to extend the lives of the assets, increase their reliability, and reduce costs.

Through the use of IT, the Company has made many significant gains in customer service, productivity, and reliability. Ongoing IT investment by the Company is vital to maintaining the gains already achieved through the use of technology. As well, ongoing investment is essential to making further improvement in customer service and operating efficiency.

2. INFORMATION TECHNOLOGY STRATEGY

This section of the evidence reviews the role, importance and direction of Newfoundland Power's capital investment in information technology.

The Information Systems category of the Company's annual capital budget contains projects that introduce further improvements in customer service, and operational efficiency. As well, this category contains projects that are designed to ensure that the improvements that have already

been realized in operational efficiency and customer service through investment in information technology are sustained.

In Order P.U. 36 (2002-2003), the Board of Commissioners of Public Utilities ("the Board") directed Newfoundland Power to prepare an updated Information Technology Strategy Report for the period 2004-2008 as part of its 2004 budget application. The *Information Technology Strategy 2004 - 2008* (the "Strategy Report") was filed with the Company's 2004 Capital Budget Application (the "Application").

2.1 Information Technology Strategy

As outlined in the Strategy Report, the Company's strategy is to align its IT investment with the imperatives of operating efficiency and customer service. This strategy is accomplished by making informed choices from among the variety of technologies that are available, and by effectively managing the installed technologies throughout their useful life.

Newfoundland Power has made considerable investment in IT applications and infrastructure to enhance customer service, to improve the reliability of its electrical distribution system, to improve public and employee safety, and to increase its overall operational efficiency. Over the course of the next five years, Newfoundland Power plans to make further improvements by investing more in the technologies already deployed throughout the Company, and less in the introduction of new applications. Also, the Company will continue to focus on extending the life of its technology infrastructure to the extent possible, without jeopardizing the gains that have already been achieved.

2.2 Managing the Investment

The full benefits of IT can only be realized when effective choices are made from the variety of options available, and when the technology is effectively managed over its life cycle. To accomplish this, Newfoundland Power takes a conservative approach to its technology investment decisions, waiting until a technology matures and becomes widely used and supported by industry leaders.

The rapid pace of change is a defining characteristic that permeates all aspects of IT. 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. Obsolescence is an ever-present challenge to cost management for IT.

The principal issue concerning Newfoundland Power in relation to the obsolescence of IT involves the OpenVMS operating system. The Company has been monitoring this issue for a number of years.

The normal upgrade and replacement of computer applications over the course of the last few years has substantially mitigated the risks to the Company associated with the OpenVMS system. In 2003, the Company undertook a study to re-assess the issue of OpenVMS obsolescence given the recent mitigated risks, and to look at options for replacing or moving its most complex OpenVMS dependent application, the CSS.

In July 2003, the Company completed the *Customer Service System Replacement Analysis*, which is provided in Volume IV, Information Systems, Appendix 3 to the Application. This analysis involved consultation with technology and utility industry experts such as the Gartner Group[1] and the META Group[2], a review of utility industry publications, and consultation with leading technology suppliers such as Microsoft and Hewlett Packard. From this analysis, the Company concluded that the OpenVMS operating system continues to be in decline and preparations for the eventual replacement of the CSS should proceed. However, since Hewlett Packard purchased the OpenVMS system through its acquisition of Compaq Computer Corporation a year ago, they have introduced a degree of stability to the product and will continue to sell it to businesses at least until 2006, and will provide support until 2011.

Currently, the CSS substantially satisfies the Company's customer service needs. It is stable and reliable and there is a commitment for support of OpenVMS by suppliers. Given this, the Company currently expects it will continue to use the CSS on the OpenVMS operating system until at least 2008.

Another assessment of the OpenVMS obsolescence issue and the CSS replacement options is planned for 2006 to determine if current levels of industry commitment remain.

[1] Gartner Group is a research and advisory firm that helps more than 10,000 businesses understand technology and drive business growth. Founded in 1979, Gartner is headquartered in Stamford, Connecticut and consists of 4,600 associates, including 1,400 research analysts and consultants, in more than 80 locations worldwide.

[2] META Group is a research and advisory firm that helps more than 3,300 businesses in 40 countries understand technology and drive business growth. Unlike Gartner and other advisory firms, META Group also provides vertical expertise and coverage of the IT solutions for industries such as energy and utilities.

Going forward, the Company will look for opportunities to make the CSS less dependent on the OpenVMS operating system by utilizing non-OpenVMS technologies during the normal course of enhancements. The benefit of this approach will be to reduce the cost and complexity of the replacement of the CSS whenever that occurs and, as well, provide a measure of protection against risk of failure in the interim.

3. 2004 CAPITAL EXPENDITURES

This section of the evidence provides a summary of the principal proposed 2004 expenditures in the Information Systems category.

The Company proposes Information Systems expenditures in the 2004 capital budget of $3,948,000, or approximately 7% of the total capital budget. These expenditures are summarized at page 8 of Schedule B to the Application. Proposed expenditures in the Information Systems capital budget are categorized as either Computer Applications or Computing Infrastructure.

3.1 Computer Applications

The Computer Applications component of the Company's Information Systems capital budget consists of a range of technology tools and software in three different areas that support business processes. The three Computer Applications projects represent approximately 60% of the total proposed Information Systems capital budget.

3.1.1 Application Enhancements

Expenditures on Application Enhancements in 2004 will total $1,355,000. This will involve enhancements to some of the approximately 30 business applications. These enhancements are intended to increase efficiencies and enhance customer service while maintaining productivity.

This expenditure is in keeping with the Company's strategy of improving upon the existing installed information technology.

Details regarding Application Enhancements are provided at page 68 of Schedule B to the Application.

3.1.2 Application Environment

A total of $791,000 will be expended on this project in 2004. It includes upgrades to the software application Microsoft Great Plains that is used by for the financial, human resources, and materials management sections of the Company. The asset management application will also be upgraded. This application is used by operations & engineering staff to manage maintenance on substation and generation equipment. Properly maintained assets are a key to a reliable, least cost supply of electricity to customers. Also included are upgrades to 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.

Details regarding Application Environment are provided in at page 70 of Schedule B to the Application.

3.1.3 Customer Systems Replacement

As outlined in the *Customer Service System Replacement Analysis* provided in Volume IV, Information Systems, Appendix 3 to the Application, the Company will complete customer service and efficiency enhancements to the CSS that will also reduce its dependence on the

OpenVMS system. In 2004, improved customer bill design and printing capability will be implemented that will provide a more readable bill statement for customers. This improvement will also reduce the reliance on OpenVMS through the elimination of programming code.

Details regarding Customer Systems Replacement are provided at page 72 to the Application.

3.2 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 2004, the three Computing Infrastructure projects account for approximately 40% of the total Information Systems capital budget.

3.2.1 Network Infrastructure

The 2004 budget includes a proposed expenditure of $393,000 for the Network Infrastructure project. This is the second year of a two-year project that was approved in 2003. For 2004, this project involves the replacement of network equipment that is no longer manufactured and for which software upgrades are unavailable.

Details regarding Network Infrastructure are provided at page 74 of Schedule B to the Application.

3.2.2 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 2004 totals $539,000.

Detail regarding Personal Computer Infrastructure are provided at page 76 of Schedule B of the Application.

3.2.3 Shared Servers Infrastructure

The proposed expenditure for the Shared Servers Infrastructure project in 2004 is $644,000. 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.

Details regarding Shared Server Infrastructure are provided at page 78 of Schedule B to the Application.

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

IN THE MATTER OF capital expenditures and rate base of Newfoundland Power Inc.; and

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

(a) approving its 2004 Capital Budget of $53,909,000; and
(b) fixing and determining its average rate base for 2002 in the amount of $573,337,000.

Prefiled Evidence of
Barry Perry and Lisa Hutchens

NEWFOUNDLAND POWER
A FORTIS COMPANY

At the hearing into Newfoundland Power's 2004 Capital Budget Application, the following Evidence will be adopted by Barry Perry, C.A., Vice President, Finance & Chief Financial Officer of Newfoundland Power and Lisa Hutchens, C.A., Manager, Finance of Newfoundland Power.

Witness profiles for Barry Perry and Lisa Hutchens follow.

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 has testified before the Board of Commissioners of Public Utilities of Newfoundland and Labrador on several occasions in his capacity as Vice-President, Finance and Chief Financial Officer of Newfoundland Power Inc.

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.

Lisa Hutchens, C.A.
Manager, Finance
Newfoundland Power Inc.

Lisa Hutchens has served as Manager, Finance of Newfoundland Power Inc. since 1997.

Prior to 1997, Ms. Hutchens was a Senior Manager with Deloitte and Touche, and held various positions within that firm in both St. John's and Halifax.

Ms. Hutchens obtained her Chartered Accountant designation while working with Deloitte & Touche, Chartered Accountants in St. John's, Newfoundland.

Ms. Hutchens is a graduate of Memorial University of Newfoundland (Bachelor of Commerce (Honours), 1987) and is a member of the Institute of Chartered Accountants of Newfoundland.

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SUMMARY OF EVIDENCE

For the purpose of regulatory continuity, Newfoundland Power is requesting that the Board approve its 2002 average rate base in the amount of $573,337,000.

Pursuant to Order No. P.U. 19 (2003), Newfoundland Power was required to move towards the adoption of the Asset Rate Base method of determining rate base. As a first step to moving to the Asset Rate Base Method the Company has included deferred charges in its rate base beginning in 2003.

As part of its 2004 capital budget application, the Company has provided evidence related to the changes in its deferred charges for 2003 and 2004.

In addition, a reconciliation of the differences between the Company's rate base and invested capital has been provided in accordance with Order No. P.U. 19 (2003). The 2004 capital budget will be financed by internally generated funds and short-term debt.

1. 2002 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 D to the Application shows the average rate base for 2001 and 2002. The 2001 average rate base of $545,162,000 was approved by the Board in Order No. P.U. 36 (2002-2003). The average rate base for 2002 is $573,337,000, as filed with the Board on March 31, 2003 in Return 3 of the Company's 2002 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.

Schedule D to the Application shows plant investment as the starting point for the calculation of rate base. The increase in the Company's average rate base from 2001 to 2002 is primarily due to increases in plant investment. The increase in plant investment is a direct result of the Company's 2002 capital expenditures approved by the Board in Order Nos. P.U. 21 (2001-2002), and P.U. 15 (2002-2003).

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. The depreciation rates in effect for 2002 were those approved by the Board in Order No. P.U. 7 (1996-97).

2. ASSET RATE BASE METHOD

This section of the evidence reviews the reconciling items between the Company's average invested capital and average rate base.

In Order No. P.U. 19 (2003) the Board approved a move toward the adoption of the Asset Rate Base method of determining rate base, and ordered the inclusion of deferred charges in the Company's rate base beginning in 2003.

Exhibit BVP-1 shows the calculation of actual average rate base for 2002 and the forecast average rate base for 2003 and 2004. The forecast average rate base for 2003 and 2004 includes deferred charges as ordered in Order No. P.U. 19 (2003).

With deferred charges included in rate base beginning in 2003, the most significant difference between the Company's rate base and its invested capital has been removed. However, there are still some remaining differences. The forecast differences between average invested capital and average rate base for 2003 and 2004 are reconciled in Table 1 below. None of the reconciling items have materially changed from those presented in the Company's 2003 General Rate Application.

Table 1
Reconciliation of Invested Capital to Rate Base
($000s)

	2003 Forecast	2004 Forecast
Average Invested Capital	670,283	705,996
Average Rate Base[1]	674,464	709,066
Difference	(4,181)	(3,070)
Reconciliation of remaining differences:		
Plant (primarily construction in progress)	2,395	1,835
Corporate Income Tax Deposit	6,949	6,949
Materials and Supplies (actual vs. allowance)	868	773
Working Capital (actual vs. allowance)	(22,371)	(21,330)
Common Equity (book vs. regulated)	7,978	8,703
	(4,181)	(3,070)

[1] Exhibit BVP-1.

The Company intends to review the appropriateness and approach to including these remaining reconciling items in its rate base in its next general rate application, in compliance with Order No. P.U. 19 (2003).

3. DEFERRED CHARGES

This section of the evidence provides information relating to the changes in the Company's deferred charges.

With the inclusion of certain deferred charges in the Company's rate base beginning in 2003, it is appropriate to review the forecast changes in the Company's deferred charges on a prospective basis.

The report entitled *Changes in Deferred Charges 2003 - 2004* (the "Report"), filed with the Application, presents a summary of the changes in the Company's forecast deferred charges for 2003 and 2004. The Report provides a description of all changes in the balances of the components of deferred charges from year to year The only difference in the information contained in the Report and that presented in the Company's 2003 General Rate Application relates to the routine operation of the Weather Normalization Account.

The Company's deferred pension costs are the largest component of both the deferred charges and the change in deferred charges from year to year. Deferred pension costs are the cumulative difference between the Company's pension funding and pension expense, and is captured on the balance sheet in accordance with Order No. P.U. 17 (1987).

Pension expense is determined based on recommendations of the Canadian Institute of Chartered Accountants (CICA) as outlined in the CICA Handbook Section 3461. *Pension funding* is determined in consultation with the Company's actuary and is comprised of current service

funding and special funding. Further details on the determination of both pension expense and pension funding are provided in the Report.

Forecast deferred pension costs for 2003 and 2004 have not changed from the forecast presented to the Board in the Company's 2003 General Rate Application. After December 31, 2003 certain determinants of pension funding and pension expense will be reviewed in accordance with pension legislation (for determining pension funding) and CICA recommendations (for determining pension expense). Pension expense and pension funding amounts for 2004 will be subject to change based upon the results of these determinations.

The Company anticipates presenting evidence on changes to 2004 pension funding and pension expense which materially impact deferred pension costs to the Board at the Company's 2005 Capital Budget Application.

4. FINANCING 2004 CAPITAL EXPENDITURES

This section of the evidence outlines Newfoundland Power's current plans for financing its 2004 capital budget.

In general, 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 (e.g. depreciation) 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 closed 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, capital expenditures will be financed through internally generated funds and short term debt.

Newfoundland Power Inc.
2004 Capital Budget

Average Rate Base
(000s)

		2002 Actual	2003 Forecast	2004 Forecast
1	Plant Investment	$1,005,674	$1,065,372	$1,104,886
2				
3	Deduct:			
4	Accumulated Depreciation	420,736	445,073	461,003
5				
6	Contributions in Aid of Construction	19,788	20,092	20,407
7				
8	Deferred Income Taxes	-	1,269	2,038
9				
10	Weather Normalization Reserve	(10,919)	(9,705)	(8,579)
11		429,605	456,729	474,869
12				
13		576,069	608,643	630,017
14				
15	Add – Contributions Country Homes	570	570	570
16				
17	Balance – Current Year	576,639	609,213	630,587
18				
19	Balance – Previous Year	553,586	576,639	609,213
20				
21	Average	565,113	592,926	619,900
22				
23	Cash Working Capital Allowance	4,712	4,973	5,036
24				
25	Materials and Supplies	3,512	3,595	3,677
26				
27	Average Rate Base at Year End	$573,337	$601,494	$628,613
28				
29	Forecast Average Deferred Charges[1]		72,970	80,453
30				
31	Revised Forecast Average Rate Base[2]		$674,464	$709,066
32				
33				
34				

35 [1] Commencing in 2003, average deferred charges are included in average rate base as per Order No. P.U. 19 (2003).
36 [2] Forecast average rate base for 2003 and 2004 includes average deferred charges.

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