DELIVERED BY HAND

August 31, 2004

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 2005 Capital Budget Application

A. General

Enclosed are 15 copies of Newfoundland Power's 2005 Capital Budget Application and supporting materials in 2 volumes. The Application is filed in compliance with the filing requirements set out in Order No. P.U. 35 (2003) (the "Order").

The following describes the organization of the Application and the contents of the 2 volumes.

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 provides a level of consistency which allows reasonable year over year comparisons.

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

To provide a reasonable measure of organization of the volume of information, the Company has presented the information in 2 volumes. Volume I contains the primary layer of information. The second, more detailed, layer of information is contained in Volume II.

Board of Commissioners of Public Utilities August 31, 2004 Page 2 of 3

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 to file with the Application:

2004 Capital Expenditure Status Report: filed in compliance with paragraph 4, page 35 of the Order;

2005 Capital Budget Plan: filed in compliance with paragraph 5, page 36 of the Order;

Report on the Amortization of the Unfunded Pension Liability: filed in compliance with paragraph 8, page 36 of the Order; and

Report on Deferred Charges and Rate Base: filed in compliance with paragraph 5(i), page 120 of Order No. P.U. 19 (2003).

Volume II: Volume II of the Application contains expenditure details, reports and studies. This information is provided to meet the requirements contained in the Order.

The information contained in Volume II 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. In that Appendix, further detail on the project can be found.

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.

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

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

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 Vice President, Regulatory Affairs & General Counsel

Enclosures

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

Newfoundland Power Inc. 2005 Capital Budget Application Filing Contents

Volume I Application

Application

Schedule A 2005 Capital Budget Summary Schedule B 2005 Capital Projects Explanations Schedule C Estimate of Future Required Expenditures on 2005 Projects Schedule D Rate Base Schedule E Average Invested Capital Schedule F Calculation of Rate of Return on Rate Base

2005 Capital Budget Plan

2004 Capital Expenditure Status Report

Report on Deferred Charges and Rate Base

Report on the Amortization of the Unfunded Pension Liability

Volume II Expenditure Details, Reports and Studies

Energy Supply

Appendix 1 Hydro Plants - Facility Rehabilitation
Appendix 2 Wesleyville Gas Turbine Overhaul
Attachment A Rolls-Royce Field Service Report dated December 22, 2003
Appendix 3 Rattling Brook Hydro Plant Refurbishment
Attachment A Engineering Plan – Rattling Brook Refurbishment
Attachment B Project Justification - Rattling Brook Refurbishment Project

Substations

Appendix 1 Rebuild Substations

Appendix 2 Replacement and Standby Substation Equipment

Transmission

Appendix 1 Rebuild Transmission Lines

Distribution

Appendix 1 Distribution Reliability Initiative

Attachment A *A Review of Reliability Gander Bay-02 Feeder*

Appendix 2 Feeder Additions and Upgrades to Accommodate Growth

Attachment A St. John's East End Planning Study: Virginia Waters, Ridge Road, Broad Cove and Pulpit Rock Substations

General Property

Appendix 1 Tools and Equipment

Appendix 2 Real Property

Transportation

Appendix 1 *Purchase Vehicles and Aerial Devices* Attachment A *Details 2005 Capital Budget Vehicle Budget*

Information Systems

Appendix 1 Application Enhancements

Appendix 2 Application Environment

Appendix 3 Customer Systems Replacement

Appendix 4 Network Infrastructure

Appendix 5 Personal Computer Infrastructure

Appendix 6 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, 78 and 80 of the Act:

- (a) approving its 2005 Capital Budget of \$48,141,000;
- (b) (i) fixing and determining its average rate base for 2003 in the amount of \$675,730,000; (ii) approving its revised forecast average rate base for 2004 in the amount of \$713,072,000; and (iii) approving its forecast average rate base for 2005 in the amount of \$740,142,000; and
- (c) approving revised values for rate base and invested capital for use in the automatic adjustment formula (the "Automatic Adjustment Formula") for the calculation of return on rate base for 2005 pursuant to Order No. P.U. 19 (2003).

2005 Capital Budget 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, 78 and 80 of the Act:

- (a) approving its 2005 Capital Budget of \$48,141,000;
- (b) (i) fixing and determining its average rate base for 2003 in the amount of \$675,730,000; (ii) approving its revised forecast average rate base for 2004 in the amount of \$713,072,000; and (iii) approving its forecast average rate base for 2005 in the amount of \$740,142,000; and
- (c) approving revised values for rate base and invested capital for use in the automatic adjustment formula (the "Automatic Adjustment Formula") for the calculation of return on rate base for 2005 pursuant to Order No. P.U. 19 (2003).
- **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 2005 Capital Budget in the amount of \$48,141,000 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 2005. 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 2005 capital expenditures, exclusive of general expenses capital, which comprise Newfoundland Power's 2005 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 2005 Capital Budget but will not be completed in 2005.

- 5. 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.
- 6. Schedule D to this Application shows Newfoundland Power's actual average rate base for 2003 of \$675,730,000; revised forecast average rate base for 2004 of \$713,072,000, and forecast average rate base for 2005 of \$740,142,000.
- 7. Schedule E to this Application shows Newfoundland Power's revised forecast average invested capital for 2004 of \$706,291,000 and forecast average invested capital for 2005 of \$736,119,000.
- 8. Schedule F to this Application shows the calculation of the rate of return on rate base for Newfoundland Power using the values approved by the Board by virtue of Order No. P.U. 19 (2003); and the rate of return on rate base using the forecast average rate base and forecast average invested capital for 2005 as set out in paragraphs 6 and 7 of this Application.
- 9. The use of current forecasts of average rate base and average invested capital for use in the Automatic Adjustment Formula is appropriate as it reflects capital expenditures approved by the Board.
- 10. Communication with respect to this Application should be forwarded to the attention of Ian Kelly, Q.C. and Gerard Hayes, Counsel to Newfoundland Power.
- 11. 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 2005 of the improvements and additions to its property in the amount of \$48,141,000;
 - (b) pursuant to Section 78 of the Act:
 - (i) fixing and determining Newfoundland Power's average rate base for 2003 in the amount of \$675,730,000;
 - (ii) approving Newfoundland Power's revised forecast average rate base for 2004 in the amount of \$713,072,000; and
 - (iii) approving Newfoundland Power's forecast average rate base for 2005 in the amount of \$740,142,000;

and

- (c) pursuant to Section 80 of the Act approving revised values for rate base and invested capital for use in the Automatic Adjustment Formula for the calculation of Newfoundland Power's return on rate base for 2005.
- **DATED** at St. John's, Newfoundland and Labrador, this 31st day of August, 2004.

NEWFOUNDLAND POWER INC.

Ian Kelly, Q.C. and Gerard Hayes Counsel to Newfoundland Power Inc. P.O. Box 8910 55 Kenmount Road St. John's, NL A1B 3P6

Telephone:	(709) 737-5609
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, 78 and 80 of the Act:

- (a) approving its 2005 Capital Budget of \$48,141,000;
- (b) (i) fixing and determining its average rate base for 2003 in the amount of \$675,730,000; (ii) approving its revised forecast average rate base for 2004 in the amount of \$713,072,000; and (iii) approving its forecast average rate base for 2005 in the amount of \$740,142,000; and
- (c) approving revised values for rate base and invested capital for use in the automatic adjustment formula (the "Automatic Adjustment Formula") for the calculation of return on rate base for 2005 pursuant to Order No. P.U. 19 (2003).

AFFIDAVIT

I, Phonse Delaney, of St. John's in the Province of Newfoundland and Labrador, Professional Engineer, make oath and say as follows:

- 1. That I am Vice-President, Engineering and Operations, 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 31st day of August, 2004, before me:

Barrister

Phonse Delaney

Newfoundland Power Inc. 2005 Capital Budget Budget Summary (000s)

Energy Supply	\$ 3,361
Substations	3,037
Transmission	2,597
Distribution	28,635
General Property	1,016
Transportation	2,642
Telecommunications	60
Information Systems	3,243
Unforeseen Items	750
General Expenses Capital	2,800
Total	\$ 48,141

ENERGY SUPPLY

<u>Project</u>	<u>(000s)</u>	Details <u>on Page</u>
HYDRO PLANTS - FACILITY REHABILITATION	\$1,887	10
WESLEYVILLE GAS TURBINE OVERHAUL	1,124	12
RATTLING BROOK - HYDRO PLANT REFURBISHMENT	350	14
TOTAL - ENERGY SUPPLY	\$3,361	

TOTAL - SUBSTATIONS

\$3,037

Newfoundland Power Inc. 2005 Capital Budget

SUBSTATIONS

<u>Project</u>	<u>(000s)</u>	Details <u>on Page</u>
REBUILD SUBSTATIONS	\$351	17
REPLACEMENT AND STANDBY SUBSTATION EQUIPMENT	1,052	19
TRANSFORMER COOLING REFURBISHMENT	174	21
PROTECTION AND MONITORING IMPROVEMENTS	78	23
DISTRIBUTION SYSTEM FEEDER REMOTE CONTROL	1,114	25
FEEDER ADDITIONS DUE TO LOAD GROWTH AND RELIABILITY	268	27

TRANSMISSION

<u>Project</u>	<u>(000s)</u>	Details <u>on Page</u>
REBUILD TRANSMISSION LINES	\$2,597	29
TOTAL - TRANSMISSION	\$2,597	

DISTRIBUTION

<u>Project</u>	<u>(000s)</u>	Details <u>on Page</u>
EXTENSIONS	\$6,374	31
METERS	965	33
SERVICES	1,895	35
STREET LIGHTING	1,254	37
TRANSFORMERS	5,189	39
RECONSTRUCTION	2,825	41
ALIANT POLE PURCHASE	4,044	43
TRUNK FEEDERS Rebuild Distribution Lines Relocate/Replace Distribution Lines For Third Parties Distribution Reliability Initiative Feeder Additions and Upgrades to Accommodate Growth	4,210 734 872 173	44 47 49 51
INTEREST DURING CONSTRUCTION	100	53
TOTAL - DISTRIBUTION	\$28,635	

GENERAL PROPERTY

<u>Project</u>	<u>(000s)</u>	Details <u>on Page</u>
TOOLS AND EQUIPMENT	\$691	54
ADDITIONS TO REAL PROPERTY	325	56
TOTAL - GENERAL PROPERTY	\$1,016	

TRANSPORTATION

<u>Project</u>	<u>(000s)</u>	Details <u>on Page</u>
PURCHASE VEHICLES AND AERIAL DEVICES	\$2,642	57
TOTAL - TRANSPORTATION	\$2,642	

TELECOMMUNICATIONS

<u>Project</u>	<u>(000s)</u>	Details <u>on Page</u>
REPLACE/UPGRADE COMMUNICATIONS EQUIPMENT	\$60	59
TOTAL - TELECOMMUNCIATIONS	\$60	

INFORMATION SYSTEMS

<u>Project</u>	<u>(000s)</u>	Details <u>on Page</u>
APPLICATION ENHANCEMENTS	\$1,087	61
APPLICATION ENVIRONMENT	710	63
CUSTOMER SYSTEMS REPLACEMENT	144	65
NETWORK INFRASTRUCTURE	276	67
PERSONAL COMPUTER INFRASTRUCTURE	455	69
SHARED SERVER INFRASTRUCTURE	571	71
TOTAL – INFORMATION SYSTEMS	\$3,243	

UNFORESEEN ITEMS

<u>Project</u>	(<u>000s)</u>	Details <u>on Page</u>
ALLOWANCE FOR UNFORESEEN ITEMS	\$750	73
TOTAL – UNFORESEEN ITEMS	\$750	

ENERGY SUPPLY

Project Title:	Hydro Plants - Facility Rehabilitation
Location:	Various
Classification:	Energy Supply
Project Cost:	\$1,887,000

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: Cape Broyle; Hearts Content; Mobile; Port Union; and, Seal Cove.

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	2005	2006	2007 - 2009	Total			
Material	\$1,401	-	-	-			
Labour – Internal	220	-	-	-			
Labour – Contract	-	-	-	-			
Engineering	224	-	-	-			
Other	42	-	-	-			
Total	\$1,887	\$1,851	\$7,628	\$11,366			

Operating Experience

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

Project Cost (000s)							
Year	Year 2000 2001 2002 2003 2004F						
Total	\$1,670	\$1,482	\$2,031	\$2,510	\$1,819		

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 104 year old Petty Harbour Plant to the 6 year old Rose Blanche Plant.

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 675,000 barrels of fuel annually. At oil prices of \$30 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 material 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:	Wesleyville Gas Turbine Overhaul
Location:	Wesleyville
Classification:	Energy Supply
Project Cost:	\$1,124,000

Project Description

This project involves the overhaul of the Wesleyville gas turbine. This involves dismantling and shipping the unit to a qualified gas turbine overhaul facility for bulk disassembly and rebuild or replacement as appropriate.

Project Cost (000s)							
Cost Category	2005	2006	2007 - 2009	Total			
Material	\$953	-	-	-			
Labour – Internal	58	-	-	-			
Labour – Contract	-	-	-	-			
Engineering	73	-	-	-			
Other	40	-	-	-			
Total	\$1,124	\$0	\$0	\$1,124			

Operating Experience

The Wesleyville gas turbine was installed in the Bonavista North area to provide emergency power in the event of loss of supply from the Island electrical grid. In December 2003, the unit was internally inspected by the original equipment manufacturer, Rolls Royce. The inspection report is included in Volume II, Energy Supply, Appendix 2, Attachment A. The inspection revealed damage to a number of the blades in the high-pressure section of the turbine. Rust and corrosion was also detected on various components of the turbine. Protection coatings are worn off the first three stages of the compressor blades. The compressor section of this unit operates at 4,800 revolutions per minute subjecting the blades to considerable rotational inertia under normal operation. It is the original equipment manufacturer's recommendation that this unit be overhauled.

Project Justification

The gas turbine has reached the stage where a bulk disassembly and rebuild is required. A major criteria used by the original equipment manufacturer in determining age and subsequently timing for a gas turbine overhaul is the number of start or attempted starts and the total turbine operating hours. The existing turbine has surpassed both criteria since its last overhaul in 1987. Any in service failure in the unit is a risk to system reliability and security of supply to the customers in the area serviced by the unit.

Future Commitments

None.

Project Title:	Rattling Brook - Hydro Plant Refurbishment
Location:	Rattling Brook, Norris Arm South
Classification:	Energy Supply
Project Cost:	\$350,000

Project Description

This project involves an assessment and detailed engineering for the refurbishment of the Rattling Brook hydroelectric generating station. The project scope includes replacement of the woodstave penstock, rehabilitation of the existing steel surge tank, replacement and refurbishment of the protection and governor control systems, and of switchgear. Detailed engineering assessment is required to further define the scope of work for this project and to determine specific requirements for electrical and mechanical work associated with plant systems. The total cost of the project is currently estimated to be \$11.4 million and is planned to be expended as noted.

Project Cost (000s)							
Cost Category	2005	2006	2007 - 2009	Total			
Material	\$-	-	-	-			
Labour – Internal	10	-	-	-			
Labour – Contract	-	-	-	-			
Engineering	276	-	-	-			
Other	64	-	-	-			
Total	\$350	\$5,643	\$5,409	\$11,402			

Operating Experience

Rattling Brook plant went into service in 1958. The system has operated continuously since that time providing an average of 69.4 GWh of energy on an annual basis. In 2002, Unit # 2 generator stator failed and was rewound, and in 2004, Unit # 1 generator stator will be rewound. With the exception of these upgrades and the addition of remote control capability from the SCADA system in 1988 there has been no significant capital investment in this facility since the original in service date.

The wood stave penstock is in poor condition, with excessive deterioration, and significant leakage along the springline. The penstock has reached the stage where there are significant leaks that develop regularly, and water leaking from the penstock continues to undermine the

supporting structure. The diameter of the penstock is also undersized, and limits the maximum output of the plant when both units are in operation. Engineering studies indicate that increasing the diameter from 2,133mm to 2,895mm diameter and replacing the leaking wooden penstock with a new steel penstock will increase annual output by as much as 7 GWh.

The steel surge tank is in fair to poor condition, and has reached the stage where significant rehabilitation of the structural steel, main tank and internal riser are now required. The external riser has also deteriorated to the point where complete replacement is necessary.

The following table gives the expenditures for the past five years for work at Rattling Brook Hydro Plant:

Project Cost (000s)								
Year	2000	2001	2002	2003	2004F			
Total	Total \$128 \$100 \$932 \$51 \$477							

Project Justification

Reports including site assessment are included in Volume II, Energy Supply, Appendix 3, Attachments A and B.

Rattling Brook generating station is the largest energy producer in Newfoundland Power's system of hydroelectric plants.

Some of the equipment within the plant is forty-six years old, is obsolete and presents challenges when components fail and need to be repaired or replaced.

The wood stave penstock has experienced failures in recent years that have allowed large amounts of water to escape in an uncontrolled manner. Inspection of the surge tank has identified deterioration of structural steel components and temporary repairs have been carried out in recent years. There is a potential for damage and risk to employee and public safety if a catastrophic failure of either the penstock or surge tank were to occur.

The age of the protection and control equipment, governor and AC station service equipment justifies their replacement based upon obsolescence. Technical support for the electromechanical protection devices is limited, and as a result, the current situation is a mix of technologies created by temporary repairs completed over the years. The protection afforded by the existing electromechanical protection devices no longer provides the minimum standard of protection leaving the units susceptible to damage.

The alternative to replacing the penstock and refurbishing this plant would be to retire it. An economic analysis of the Rattling Brook hydroelectric system, considering this project and the

expected capital and operating expenditures required over the next 25 years, indicates a positive net present value and an incremental levelized cost of energy, including capital and operating expenditures over the next 25 years of 1.7 cents per kWh. Energy from Rattling Brook can be produced at a cost significantly lower than that of replacement energy from Hydro's Holyrood Generating Station.

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

2006 - \$5,643,000 2007 - \$5,409,000 **SUBSTATIONS**

Project Title:	Rebuild Substations
Location:	Greenspond, Grand Beach, Topsail and St. John's Main
Classification:	Substations
Project Cost:	\$351,000

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 St. John's Main substation, with additional minor work at three other substations.

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

Project Cost (000s)							
Cost Category	2005	2006	2007 - 2009	Total			
Material	\$232	-	-	-			
Labour – Internal	61	-	-	-			
Labour – Contract	-	-	-	-			
Engineering	46	-	-	-			
Other	12	-	-	-			
Total	\$351	\$429	\$4,704	\$5,484			

Operating Experience

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

Project Cost (000s)							
Year	Year 2000 2001 2002 2003 2004F						
Total	\$426	\$1,191	\$687	\$399	\$531		

Project Justification

The Company has 137 substations varying in age from 3 years to greater than 100 years. The original cost 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 and Standby Substation Equipment
Location:	Various substations including Rocky Pond, Hardwoods, Twillingate and Garnish
Classification:	Substations
Project Cost:	\$1,052,000

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 2005 are noted above. Details are contained in Volume II, Substations, Appendix 2.

Project Cost (000s)							
Cost Category	2005	2006	2007 - 2009	Total			
Material	\$642	-	-	-			
Labour – Internal	223	-	-	-			
Labour – Contract	-	-	-	-			
Engineering	174	-	-	-			
Other	13	-	-	-			
Total	\$1,052	\$1,201	\$6,727	\$8,980			

Operating Experience

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

Project Cost (000s)							
Year	Year 2000 2001 2002 2003 2004F						
Total	\$313	\$232	\$2,716	\$1,159	\$1,287		

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:	Humber
Classification:	Substations
Project Cost:	\$174,000

Project Description

This project involves the replacement of cooling radiators on two power transformers at Humber Substation that have begun to leak oil as a result of corrosion. This will address environmental concerns of oil spills due to leaking equipment.

Project Cost (000s)					
Cost Category	2005	2006	2007 - 2009	Total	
Material	\$87	-	-	-	
Labour – Internal	37	-	-	-	
Labour – Contract	-	-	-	-	
Engineering	45	-	-	-	
Other	5	-	-	-	
Total	\$174	\$300	\$600	\$1,074	

Operating Experience

The original radiators supplied with the transformers when they were purchased in 1968 and 1974 respectively, 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 (000s)							
Year	Year 2000 2001 2002 2003 2004F						
Total	\$206	\$0	\$0	\$0	\$293		

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 and Monitoring Improvements
Location:	Bay Roberts, Memorial and Gander
Classification:	Substations
Project Cost:	\$78,000

Project Description

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

In 2005, work will take place at Bay Roberts Substation where a tap changer controller will be installed, at Memorial Substation where current transformers will be installed on the bus tie breaker and at Gander Substation where test blocks will be added to the 138 kV bus protection.

Project Cost (000s)					
Cost Category	2005	2006	2007 - 2009	Total	
Material	\$20	-	-	-	
Labour – Internal	21	-	-	-	
Labour – Contract	-	-	-	-	
Engineering	37	-	-	-	
Other	-	-	-	-	
Total	\$78	\$625	\$693	\$1,396	

Operating Experience

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

Project Cost (000s)								
Year	Year 2000 2001 2002 2003 2004F							
Total	\$92	\$283	\$116	\$448	\$60			

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 reliable 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

Project Title:	Distribution System Feeder Remote Control
Location:	Various substations including Broad Cove, Lewisporte and Long Lake
Classification:	Substations
Project Cost:	\$1,114,000

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 2004, the System Control Centre (SCC) will have remote control over 55 feeders through new electronic feeder relays and over 40 feeders through reclosers.

In 2005, 11 feeder relays will be replaced at various substations. There will also be 9 reclosers replaced in Broad Cove, Lewisporte and Long Lake substations.

Project Cost (000s)							
Cost Category	2005	2006	2007 - 2009	Total			
Material	\$587	-	-	-			
Labour – Internal	218	-	-	-			
Labour – Contract	-	-	-	-			
Engineering	290	-	-	-			
Other	19	-	-	-			
Total	\$1,114	\$1,024	\$3,000	\$5,138			

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.

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

Project Cost (000s)									
Year	Year 2000 2001 2002 2003 2004F								
Total									

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

Project Title:	Feeder Additions Due To Load Growth and Reliability
Location:	Virginia Waters Substation
Classification:	Substations
Project Cost:	\$268,000

This project involves the installation of a new 25 kV feeder at the Virginia Waters substation in the east end of St. John's to accommodate growth.

Details are contained in Volume II, Distribution, Appendix 2, Attachment A.

Project Cost (000s)							
Cost Category	2005	2006	2007 - 2009	Total			
Material	\$177	-	-	-			
Labour – Internal	35	-	-	-			
Labour – Contract	-	-	-	-			
Engineering	40	-	-	-			
Other	16	-	-	-			
Total	\$268	\$412	\$380	\$1,060			

Operating Experience

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

Project Cost (000s)								
Year	Year 2000 2001 2002 2003 2004F							
Total								

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

TRANSMISSION

Project Title:	Rebuild Transmission Lines
Location:	Various
Classification:	Transmission
Project Cost:	\$2,597,000

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

The work includes major upgrades on transmission lines 11L, 43L and 124L. Expenditures estimated at less than \$50,000 will take place on approximately 50 other lines.

Project Cost (000s)							
Cost Category	2005	2006	2007 - 2009	Total			
Material	\$1,102	-	-	-			
Labour – Internal	665	-	-	-			
Labour – Contract	495	-	-	-			
Engineering	110	-	-	-			
Other	225	-	-	-			
Total	\$2,597	\$5,154	\$15,506	\$23,257			

Operating Experience

Many of the Company's transmission lines are experiencing pole, crossarm, conductor, insulator and hardware deterioration. Replacement is required to maintain the strength and integrity of these lines. Thirty per cent of the Company's 110 transmission lines are in excess of forty years of age.

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

Project Cost (000s)									
Year	Year 2000 2001 2002 2003 2004F								
Total									

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 safe & reliable service to customers.

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

Future Commitments

DISTRIBUTION

Project Title:	Extensions
Location:	Various
Classification:	Distribution
Project Cost:	\$6,374,000

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	2005	2006	2007 - 2009	Total			
Material	\$2,089	-	-	-			
Labour – Internal	1,959	-	-	-			
Labour – Contract	1,516	-	-	-			
Engineering	626	-	-	-			
Other	184	-	-	-			
Total	\$6,374	\$5,581	\$16,431	\$28,386			

Operating Experience

The project cost for the connection of new customers is calculated on the basis of historical data. 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 independent agencies.

Project Cost (000s)								
Year	Year 2000 2001 2002 2003 2004F							
Total	\$3,981	\$5,404	\$5,717	\$6,586	\$6,854			

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

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

Project Title:	Meters
Location:	Various
Classification:	Distribution
Project Cost:	\$965,000

This project includes the purchase and installation of meters for new customers and replacement meters for existing customers. In 2005 the Company proposes the purchase and installation of meters as noted in the table below.

Meter Type	Number of Meters
Energy Only Domestic Meters	8,000
Other Energy Only and Demand Meters	1,010

Project Cost

Project Cost (000s)					
Cost Category	2005	2006	2007 - 2009	Total	
Material	\$787	-	-	-	
Labour – Internal	149	-	-	-	
Labour – Contract	28	-	-	-	
Engineering	-	-	-	-	
Other	1	-	-	-	
Total	\$965	\$819	\$2,479	\$4,263	

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 retired meters and sampling results from previous years. Sampling is done in accordance with regulations under the Electricity and Gas Inspection Act.

Project Cost (000s)							
Year	Year 2000 2001 2002 2003 2004F						
Total	\$564	\$569	\$674	\$595	\$1,287		

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

Project Justification:

The requirement for regular meters is based on customer requirements and Industry Canada regulations.

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

Future Commitments

Project Title:	Services
Location:	Various
Classification:	Distribution
Project Cost:	\$1,895,000

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	2005	2006	2007 - 2009	Total	
Material	\$567	-	-	-	
Labour – Internal	1,024	-	-	-	
Labour – Contract	121	-	-	-	
Engineering	159	-	-	-	
Other	24	-	-	-	
Total	\$1,895	\$1,820	\$5,473	\$9,188	

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 followed for replacement services using historical actual expenditures to replace damaged or deteriorated service wires. Street light customers are excluded for the purpose of this calculation.

Project Cost (000s)							
Year	Year 2000 2001 2002 2003 2004F						
Total	\$1,532	\$1,838	\$1,843	\$1,989	\$1,876		

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

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

Project Title:	Street Lighting
Location:	Various
Classification:	Distribution
Project Cost:	\$1,254,000

This project involves the installation of new lighting fixtures, replacement of existing 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 fixtures requiring replacement.

Project Cost (000s)					
Cost Category	2005	2006	2007 - 2009	Total	
Material	\$757	-	-	-	
Labour – Internal	326	-	-	-	
Labour – Contract	133	-	-	-	
Engineering	37	-	-	-	
Other	1	-	-	-	
Total	\$1,254	\$1,107	\$3,313	\$5,674	

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.

Project Cost (000s)							
Year	Year 2000 2001 2002 2003 2004F						
Total	\$911	\$935	\$1,199	\$1,287	\$1,144		

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

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

Project Title:	Transformers
Location:	Various
Classification:	Distribution
Project Cost:	\$5,189,000

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	2005	2006	2007 - 2009	Total	
Material	\$5,189	-	-	-	
Labour – Internal	-	-	-	-	
Labour – Contract	-	-	-	-	
Engineering	-	-	-	-	
Other	-	-	-	-	
Total	\$5,189	\$4,700	\$13,798	\$23,687	

Operating Experience

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

- a) The number of transformers required for new customers is based upon the forecast number of new residential and general service customers.
- 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.

Project Cost (000s)					
Year	2000	2001	2002	2003	2004F
Total	\$4,243	\$4,550	\$5,194	\$5,529	\$5,340

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

Project Justification

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

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

Future Commitments

Project Title:	Reconstruction
Location:	Various
Classification:	Distribution
Project Cost:	\$2,825,000

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 the year as a result of 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	2005	2006	2007 - 2009	Total
Material	\$634	-	-	-
Labour – Internal	1,224	-	-	-
Labour – Contract	719	-	-	-
Engineering	135	-	-	-
Other	113	-	-	-
Total	\$2,825	\$3,064	\$9,853	\$15,742

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 (000s)					
Year	2000	2001	2002	2003	2004F
Total	\$1,888	\$2,547	\$2,878	\$2,846	\$2,440

Project Justification

These projects are justified on the need to replace damaged electrical equipment to maintain a safe and reliable 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

Project Title:	Aliant Pole Purchase
Location:	Corporate
Classification:	Distribution
Project Cost:	\$4,044,000

This project covers the 2005 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 between Newfoundland Power Inc. and Aliant Telecom Inc. covering the purchase of all joint-use poles within Newfoundland Power's service territory over a five year period.

Future Commitments

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:	\$4,210,000

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, crossarms, conductor, cutouts, surge/lightning arrestors, insulators and transformers.

The work for 2005 includes feeder improvements on 52 of the Company's 300 feeders, and the replacement of deteriorated padmount transformers and underground services.

		Project Cost (000s)		
Cost Category	2005	2006	2007 - 2009	Total
Material	\$2,018	-	-	-
Labour – Internal	1,608	-	-	-
Labour – Contract	305	-	-	-
Engineering	53	-	-	-
Other	226	-	-	-
Total	\$4,210	\$5,347	\$14,850	\$24,407

		Ŭ	et Cost 10s)		
Year	2000	2001	2002	2003	2004F
Total	\$755	\$2,223	\$3,210	\$3,351	\$4,181

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

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 PCBs 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 the 2004 Capital Budget Application, 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 the 2004 Capital Budget Application, 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 the 2004 Capital Budget Application, Volume III, Distribution, Appendix 2, Attachment D.
- g) Hardware that has high risk of failure, such as automatic sleeves and porcelain cutouts. See the 2004 Capital Budget Application, 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

Relocate/Replace Distribution Lines For Third Parties
Various
Distribution
\$734,000

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, Persona and Rogers Cable, (3) requests from customers or (4) vehicle accident damage.

		Project Cost (000s)		
Cost Category	2005	2006	2007 - 2009	Total
Material	\$185	-	-	-
Labour – Internal	258	-	-	-
Labour – Contract	247	-	-	-
Engineering	22	-	-	-
Other	22	-	-	-
Total	\$734	\$435	\$1,305	\$2,474

Operating Experience

The cost estimate is based on historical expenditures and 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. Historical costs have varied significantly from year to year based on third party requests. Recent increases are primarily due to other utility and government initiated work.

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

		U	ct Cost 10s)		
Year	2000	2001	2002	2003	2004F
Total	\$769	\$585	\$390	\$330	\$620

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

Project Title:	Distribution Reliability Initiative
Location:	Various
Classification:	Distribution
Project Cost:	\$872,000

The project involves the replacement of deteriorated poles, conductor and hardware 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	2005	2006	2007 - 2009	Total
Material	\$375	-	-	-
Labour – Internal	250	-	-	-
Labour – Contract	116	-	-	-
Engineering	17	-	-	-
Other	114	-	-	-
Total	\$872	\$1,568	\$3,000	\$5,440

Operating Experience

The following table identifies the feeders selected for upgrading in 2005 and indicates the number of customers affected, and the average unscheduled distribution yearly interruption statistics for the five-year period ending December 31, 2003. The SAIFI and SAIDI statistics exclude planned power interruptions and interruptions due to loss of supply from Hydro. See 2004 Capital Budget Application, Volume III, Distribution, Appendix 3, Attachment A for an analysis of WES-02. An analysis of GBY-02 is contained in Volume II, Distribution, Appendix 1, Attachment A of this Application.

	Number of	SAIFI ¹ Interruptions	SAIDI ² Hours
Feeder	Customers	Per Year	Per Year
Lumsden/Cape Freels (WES-02)	766	3.9	8.0
Carmanville/Gander Bay (GBY-02)	886	3.5	8.2
Company Average		1.6	2.3

Notes:

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.

		U	et Cost 0s)		
Year	2000	2001	2002	2003	2004F
Total	\$1,776	\$3,422	\$1,092	\$1,546	\$889

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 \$692,000 will be expended in 2004, and approximately \$407,000 in 2005.

The total GBY-02 project is estimated at \$863,000 of which \$465,000 will be expended in 2005 and approximately \$398,000 in 2006.

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

Feeder Additions and Upgrades to Accommodate Growth
Virginia Waters, Broad Cove and Grand Bay
Distribution
\$173,000

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 2005 includes the construction of a new feeder at Virginia Waters and the installation of voltage regulators on the Broad Cove-04 and Grand Bay-02 feeders.

		Project Cost (000s)		
Cost Category	2005	2006	2007 - 2009	Total
Material	\$122	-	-	-
Labour – Internal	28	-	-	-
Labour – Contract	19	-	-	-
Engineering	4	-	-	-
Other	-	-	-	-
Total	\$173	\$202	\$150	\$525

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 II, Distribution, Appendix 2 for more details.

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

		•	ct Cost 10s)		
Year	2000	2001	2002	2003	2004F
Total	\$262	\$0	\$0	\$454	\$544

Project Justification

This project is required to maintain substation transformer loading, voltage regulation and/or conductor loading 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

Project Title:	Interest During Construction
Location:	N/A
Classification:	Distribution
Project Cost:	\$100,000

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.

			ct Cost)0s)		
Year	2000	2001	2002	2003	2004F
Total	\$83	\$78	\$80	\$74	\$100

Project Justification

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

Future Commitments

GENERAL PROPERTY

Project Title:	Tools and Equipment
Location:	Company offices, service buildings and vehicles
Classification:	General Property
Project Cost:	\$691,000

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 2005 are contained in Volume II, General Property, Appendix 1.

		Project Cost (000s)		
Cost Category	2005	2006	2007 - 2009	Total
Material	\$691	-	-	-
Labour – Internal	-	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	-	-	-	-
Total	\$691	\$505	\$1,245	\$2,441

Operating Experience

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

			ct Cost 10s)		
Year	2000	2001	2002	2003	2004F
Total	\$427	\$537	\$378	\$865	\$574

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

Project Title:	Additions to Real Property
Location:	Electrical Maintenance Facility, Duffy Place Building, Kenmount Road Building, Corner Brook West Street Building
Classification:	General Property
Project Cost:	\$325,000

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 II, General Property, Appendix 2.

Project Cost (000s)							
Cost Category	2005	2006	2007 - 2009	Total			
Material	\$221	-	-	-			
Labour – Internal	4	-	-	-			
Labour – Contract	-	-	-	-			
Engineering	2	-	-	-			
Other	98	-	-	-			
Total	\$325	\$918	\$1,854	\$3,097			

Operating Experience

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

Project Cost (000s)							
Year	2000	2001	2002	2003	2004F		
Total	\$503	\$407	\$337	\$237	\$271		

Project Justification

The project is necessary to maintain buildings and support facilities and to operate them in a safe and efficient manner.

Future Commitments

TRANSPORTATION

Project Title:	Purchase Vehicles and Aerial Devices
Location:	Various
Classification:	Transportation
Project Cost:	\$2,642,000

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

Project Cost (000s)						
Cost Category	2005	2006	2007 - 2009	Total		
Material	\$2,587	-	-	-		
Labour – Internal	46	-	-	-		
Labour – Contract	-	-	-	-		
Engineering	-	-	-	-		
Other	9	-	-	-		
Total	\$2,642	\$2,987	\$7,871	\$13,500		

The following table lists units to be acquired in 2004.

Category	No. of Units
Heavy fleet vehicles ¹	7
Heavy fleet vehicles ¹ Passenger vehicles ²	46
Off-road vehicles ³	8
Total	61

Notes:

- ² The Passenger/Off-Road Vehicles category includes the purchase of cars and light duty trucks.
- ³ The off-road category includes snowmobiles, ATVs and trailers.

¹ The Heavy Fleet Vehicles category includes the purchase of replacement line trucks.

Operating Experience

Volume II, 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 (000s)						
Year	Year 2000 2001 2002 2003 2004F						
Total							

Project Justification

The Company has a guideline that initiates the consideration of the replacement of vehicles. For heavy fleet vehicles the guideline is age of 10 years or 250,000 kilometers. For passenger vehicles the guideline is age of 5 years or 150,000 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 to ensure the lowest possible cost consistent with reliable service.

Future Commitments

TELECOMMUNICATIONS

Project Title:	Replace/Upgrade Communications Equipment
Location:	Various
Classification:	Telecommunications
Project Cost:	\$60,000

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

Project Cost (000s)						
Cost Category	2005	2006	2007 - 2009	Total		
Material	\$35	-	-	-		
Labour – Internal	-	-	-	-		
Labour – Contract	-	-	-	-		
Engineering	25	-	-	-		
Other	-	-	-	-		
Total	\$60	\$75	\$361	\$496		

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 (000s)					
Year	Year 2000 2001 2002 2003 2004F					
Total	\$125	\$94	\$105	\$41	\$160	

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

INFORMATION SYSTEMS

Project Title:	Application Enhancements
Location:	All Service Areas
Classification:	Information Systems
Project Cost:	\$1,087,000

The Company has software applications that are custom developed, such as the Customer Service System ("CSS") and the Outage Management System, 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. For details see Volume II, Information Systems, Appendix 1.

Project Cost (000s)						
Cost Category	2005	2006	2007 - 2009	Total		
Material	\$135	-	-	-		
Labour – Internal	684	-	-	-		
Labour – Contract	-	-	-	-		
Engineering	-	-	-	-		
Other	268	-	-	-		
Total	\$1,087	\$1,377	\$3,225	\$5,689		

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 (000s)					
Year	Year 2000 2001 2002 2003 2004F					
Total	\$906	\$619	\$726	\$920	\$1,319	

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

Project Title:	Application Environment
Location:	All Service Areas
Classification:	Information Systems
Project Cost:	\$710,000

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 II, Information Systems, Appendix 2.

Project Cost (000s)						
Cost Category	2005	2006	2007 - 2009	Total		
Material	\$280	-	-	-		
Labour – Internal	330	-	-	-		
Labour – Contract	-	-	-	-		
Engineering	-	-	-	-		
Other	100	-	-	-		
Total	\$710	\$701	\$2,832	\$4,243		

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 (000s)						
Year	Year 2000 2001 2002 2003 2004F						
Total	\$587	\$560	\$724	\$721	\$811		

Project Justification

This project is justified on the basis of maintaining customer service and 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

Project Title:	Customer Systems Replacement
Location:	All Service Areas
Classification:	Information Systems
Project Cost:	\$144,000

This project involves efficiency enhancements to the Customer Service System which also will reduce reliance on the OpenVMS operating system. This includes improvements to the CSS overnight batch processing. For details see Volume II, Information Systems, Appendix 3.

Project Cost (000s)							
Cost Category	2005	2006	2007 - 2009	Total			
Material	\$-	-	-	-			
Labour – Internal	103	-	-	-			
Labour – Contract	-	-	-	-			
Engineering	-	-	-	-			
Other	41	-	-	-			
Total	\$144	\$170	\$526	\$840			

Operating Experience

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

Project Cost (000s)							
Year	Year 2000 2001 2002 2003 2004F						
Total							

Project Justification

This project is justified on the basis of improved 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

Network Infrastructure
All Service Areas
Information Systems
\$276,000

This project involves the replacement of aging network components that have reached the end of their useful life and upgrades to increase the connectivity and reliability of the data centers located at Kenmount Road, Duffy Place, and Topsail Road. For details see Volume II, Information Systems, Appendix 4.

Project Cost (000s)							
Cost Category	2005	2006	2007 - 2009	Total			
Material	\$196	-	-	-			
Labour – Internal	53	-	-	-			
Labour – Contract	-	-	-	-			
Engineering	-	-	-	-			
Other	27	-	-	-			
Total	\$276	\$50	\$250	\$576			

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 (000s)						
Year	Year 2000 2001 2002 2003 2004F						
Total	\$205	\$0	\$0	\$532	\$393		

Project Justification

This project is justified on the basis of maintaining customer service and 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

Project Title:	Personal Computer Infrastructure
Location:	All Service Areas
Classification:	Information Systems
Project Cost:	\$455,000

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 experiences a four to six year life cycle for personal computers. In 2005, 113 PCs will be replaced (88 desktop computers and 25 laptop computers). This project also covers the purchase of 6 printers to replace existing printers that have reached the end of their useful life and additional peripheral equipment such as monitors. For details see Volume II, Information Systems, Appendix 5.

Project Cost (000s)							
Cost Category	2005	2006	2007 - 2009	Total			
Material	\$262	-	-	-			
Labour – Internal	91	-	-	-			
Labour – Contract	-	-	-	-			
Engineering	-	-	-	-			
Other	102	-	-	-			
Total	\$455	\$550	\$1,655	\$2,660			

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 (000s)					
Year	2000	2001	2002	2003	2004F	
Total	\$784	\$405	\$635	\$518	\$459	

Project Justification

This project is justified on the basis of maintaining customer service and operational efficiencies.

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

Future Commitments

Shared Server Infrastructure
All Service Areas
Information Systems
\$571,000

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 II, Information Systems, Appendix 6.

Project Cost (000s)						
Cost Category	2005	2006	2007 - 2009	Total		
Material	\$320	-	-	-		
Labour – Internal	163	-	-	-		
Labour – Contract	-	-	-	-		
Engineering	-	-	-	-		
Other	88	-	-	-		
Total	\$571	\$750	\$2,201	\$3,522		

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 (000s)							
Year 2000 2001 2002 2003 2004F							
Total	\$286	\$625	\$705	\$1,608	\$686		

Project Justification

This project is justified on the basis of maintaining customer service and 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

UNFORESEEN ITEMS

Project Title:	Allowance for Unforeseen Items
Location:	Various
Classification:	Unforeseen Items
Project Cost:	\$750,000

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 and 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

Newfoundland Power Inc. 2005 Capital Budget Estimate of Future Required Expenditures on 2005 Projects (000s)

Budget Class and Project	<u>2005</u>	<u>2006</u>	<u>2007</u>
Energy Supply			
Rattling Brook - Hydro Plant Refurbishment	\$350	\$5,643	\$5,409

Newfoundland Power Inc. 2005 Capital Budget Rate Base (000s)

	Historia	cal Data		Forecast <u>2005</u>	
	<u>2002</u>	<u>2003</u>	Forecast <u>2004</u>		
Plant Investment	\$ 1,005,674	\$ 1,069,420	\$ 1,109,713	\$ 1,146,952	
Deduct: Accumulated Depreciation	420,736	448,245	464,072	482,406	
Contributions in Aid of Construction	19,788	20,300	20,915	21,242	
Deferred Income Taxes	-	988	1,425	1,208	
Weather Normalization Reserve	(10,919) 429,605	(10,435) 459,098	(11,368) 475,044	(10,242) 494,614	
Add - Contributions Country Homes	576,069 570	610,322 653	634,669 550	652,338 550	
Balance - Current Year	576,639	610,975	635,219	652,888	
Balance - Previous Year	553,586	576,639	610,975	635,219	
Average	565,113	593,807	623,097	644,054	
Cash Working Capital Allowance	4,712	4,977	5,248	5,495	
Materials and Supplies	3,512	4,009	4,575	4,085	
Average Deferred Charges ¹	-	72,937	80,152	86,508	
Average Rate Base at Year End	\$ 573,337	\$ 675,730	\$ 713,072	\$ 740,142	

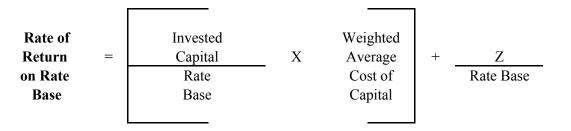
¹ As per Order No. P.U. 19 (2003), the Board approved a change in Average Rate Base to include Average Deferred Charges beginning in 2003.

Newfoundland Power Inc. 2005 Capital Budget Average Invested Capital

	Forec 200		Forecast 2005		
	(000s)	%	(000s)	%	
Common Equity	\$ 316,947	44.87%	\$ 329,524	44.77%	
Debt	379,915	53.79%	397,166	53.95%	
Preferred Equity	9,429	1.34%	9,429	1.28%	
Total	\$ 706,291	100.00%	\$ 736,119	100.00%	

Newfoundland Power Inc. 2005 Capital Budget Calculation of Rate of Return on Rate Base

Return on Rate Base Formula Approved by Order No. P.U. 36 (1998-99):



Where Z represents amounts which are recognized in the calculation of either weighted average cost of capital or rate of return on rate base, but not both. These amounts include:

- (a) Amortization of Capital Stock Issue Expenses (Recognized in the rate of return on rate base calculation but not the weighted average cost of capital calculation.);
- (b) Interest on Customer Deposits (Recognized in the weighted average cost of capital calculation but not the rate of return on rate base calculation.); and,
- (c) Interest Charged to Construction (Recognized in the rate of return on rate base calculation but not the weighted average cost of capital calculation.).

2004 (approved by Order No. P.U. 19 (2003)):

$$8.91\% = \frac{\$ 700,244}{\$ 703,102} \times \frac{\$.97\%}{4} + \frac{\$ 66 + \$ 30 - \$ 246}{\$ 703,102}$$

Forecast 2005 rate base and invested capital values as per 2005 capital budget application, and an allowed return on equity of 9.75%:

$$8.90\% = \frac{\$ 736,119}{\$ 740,142} \times 8.97\% + \frac{\$ 66 + \$ 30 - \$ 246}{\$ 740,142}$$

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, 78 and 80 of the Act:

- (a) approving its 2005 Capital Budget of \$48,141,000;
- (b) (i) fixing and determining its average rate base for 2003 in the amount of \$675,730,000; (ii) approving its revised forecast average rate base for 2004 in the amount of \$713,072,000; and (iii) approving its forecast average rate base for 2005 in the amount of \$740,142,000; and
- (c) approving revised values for rate base and invested capital for use in the automatic adjustment formula (the "Automatic Adjustment Formula") for the calculation of return on rate base for 2005 pursuant to Order No. P.U. 19 (2003).

2005 Capital Budget Plan

August 31, 2004



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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 Order directed the Company to file a Capital Budget Plan as part of its 2004 Capital Budget Application.

In Order No. P.U. 35 (2003) the Board reiterated its position.

"Unless otherwise directed by the Board, NP shall file a 'Capital Budget Plan' as part of its 2005 and future Capital Budget Applications and should include:

- (a) An updated five (5) year plan for maintaining the stability of the capital budget and capital works program, including an amount of maximum budget growth and a contingency for unexpected or unusual events during the period; and
- (b) Identification of any changes or anticipated change in expenditure patterns and full explanation of reasons therefore."

The 2005 Capital Budget Plan (the "Plan") is filed by Newfoundland Power as part of its 2005 Capital Budget Application in compliance with the Board's directives.

The Plan includes:

- An overview of expenditure patterns by budget category and origin;
- A summary of the five-year plan for maintaining the stability of the capital budget and the capital works program; and,
- An assessment of risks to the plan including the maximum budget growth and a contingency for unexpected or unusual events during the period.

II. Capital Budget Plan

This report outlines a five-year capital budget 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 \$256 million in plant and equipment during the 2005 through 2009 period. On an annual basis capital expenditures are expected to average approximately \$51 million and range from a low of \$48 million in 2005 to a high of \$55 million in 2006. As shown in Chart 1, excluding expenditures related to the

purchase of joint-use poles from Aliant, planned capital expenditures are forecast to remain relatively stable and consistent with the average for the past five years.

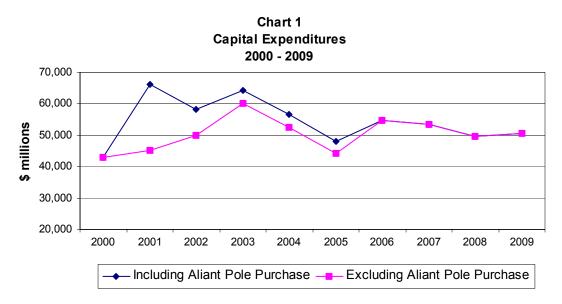
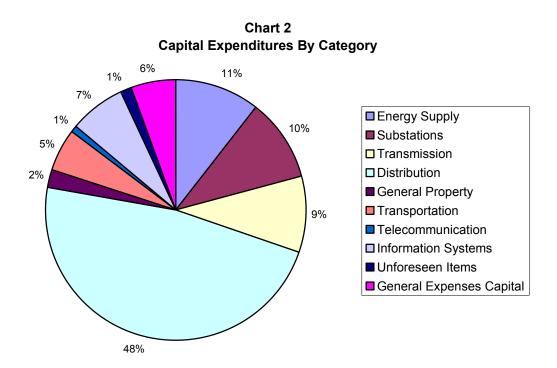
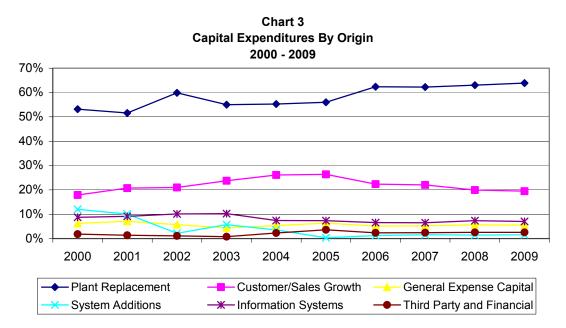


Chart 2 indicates the Distribution category accounts for 48% of all planned expenditures over the next five years, followed by Energy Supply (11%), Substations (10%) and Transmission (9%). The remaining six categories account for 22% of total capital expenditures for the 2005 through 2009 period. The pattern of planned capital expenditures by category is consistent with that of the 2000 through 2004 period.



Expenditures by origin during the 2005 through 2009 period are also similar to the 2000 through 2004 period. As shown in Chart 3, the Company does not anticipate any significant changes in the pattern of expenditures by origin.



Like most North American utilities, Newfoundland Power must address the issue of aging infrastructure. As the infrastructure ages, the power system becomes less safe, less reliable, and more expensive to operate and maintain. The Company therefore continues to focus on the replacement of deteriorated, defective or obsolete electrical equipment, which accounts for approximately 60% of total capital expenditures (excluding the purchase of joint-use poles from Aliant).

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.

Many of the Company's hydro generating plants 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 Rattling Brook, Heart's Content and Rocky Pond hydroelectric plants. These

expenditures are required to maintain energy production levels and to maintain safe and reliable service to customers.

Capital expenditures related to customer and sales growth are expected to decline from 26% of total expenditures in 2005 to 20% in 2009. This pattern of expenditures mirrors the forecast economic performance for the province.

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 Summary

A summary of planned capital expenditures for the 2005 - 2009 period by category along with a breakdown by project is contained in Appendix A. 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. While these facilities are relatively small when viewed as stand-alone production centers, collectively they displace approximately 675,000 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.

While Energy Supply capital expenditures are expected to average \$5.4 million per year over the 2005 to 2009 period, annual expenditures range from a low of \$3.4 million in 2005 to a high of \$7.5 million in 2006. The increased level of expenditures in 2006 and 2007 are related to the refurbishment of the Rattling Brook Plant, the Company's largest hydroelectric plant. This project, which includes the replacement of the penstock and other key components of the plant, will be completed in 2007 at a total cost of approximately \$11.4 million. In addition, \$3.0 million has been included in 2009 for the replacement of the penstocks at Heart's Content and Rocky Pond.

2. Substations

The Substations 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 Plan also includes the addition of a transformer at the

Glendale substation in 2006 and the construction of a new substation in the Humber Valley in 2007. The projects in this category focus on improved system reliability and operational efficiency, safety, reduced environmental risk associated with oil-filled reclosers, and meeting customer growth.

Substation capital expenditures are expected to average \$5.2 million annually over the 2005 through 2009 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 in this category are primarily focused on reliability and safety.

As a result of the need to refurbish the Company's oldest transmission lines, transmission expenditures will increase from \$2.6 million in 2005 to an average of \$5.2 million annually over the 2006 through 2009 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 is recovered from the parties making the requests.

Distribution capital expenditures are expected to decline from \$28.6 million in 2005 to \$23.7 million in 2009. 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 2004.

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 \$1.1 million annually over the 2005 through 2009 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 2005 through 2009 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 2005 through 2009 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 applications 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 \$3.5 million annually over the 2005 through 2009 period.

9. Unforeseen Items

The Unforeseen Items category covers any unforeseen capital expenditures that 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 the approval of the Board. Unforeseen Items capital expenditures are budgeted at \$750,000 annually over the 2005 through 2009 period.

10. General Expenses Capital

The General Expenses Capital category covers the allocation of a portion of administrative costs to capital. In accordance with Order No. P.U. 3 (1995-96), the Company uses the incremental cost method of accounting for the purpose of capitalization of general expenses.

General Expenses Capital expenditures are budgeted at \$2.8 million annually over the 2005 through 2009 period.

C. Plan Risks

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 2005 through 2009.

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 that 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 uncertainty of the project's proceeding at this time, it has not been included in the Plan.

The Company's Customer Service System ("CSS") is 12 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 2009. Accordingly, while the Company has no plans to replace CSS during the 2005 through 2009 period, changing technology and vendor support could conceivably dictate otherwise. Eventual replacement of the CSS will likely be staged over more than 1 year.

Capital expenditures can be impacted by natural disasters. In 1984 and 1994, the Company was impacted by sleet storms that resulted in widespread damage and service interruption to customers. In 2003, Hurricane Juan hit Nova Scotia, resulting in severe damage to that province's transmission and distribution systems and the loss of power to over 260,000 customers. The occurrence and costs of natural disasters are not predictable.

Overall, planned capital expenditures are forecast to be relatively stable during the 2005 through 2009 period. However, circumstances can change and, as a result, so can 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 mine mentioned above) could conceivably add 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. This amount is in the nature of a contingency for unexpected or unusual events. While the amount is not in the nature of an *approved* expenditure, it provides an allowance for unexpected events of almost 1.5% of the average budget.

The allowance of a larger contingency of, say, 5% of the average budget, or approximately \$2.5 million, would allow the Company greater flexibility to respond expeditiously to unforeseen circumstances. However, the number of supplementary approvals required in recent years has not been unduly large or burdensome. The current allowance therefore appears to be sufficient for present circumstances.

III. Summary

Over the next five years, the Company plans to invest approximately \$256 million in plant and equipment. Planned expenditures are expected to remain relatively stable in all categories, and consistent with expenditures incurred during the 2000 through 2004 period.

Approximately 60% of planned expenditures focus on the replacement of deteriorated, defective or obsolete distribution, transmission, generation and substation electrical equipment. Capital expenditures related to customer and sales growth is forecast to decline as a result of reduced growth in the number of customers served and the completion of the purchase of the joint-use poles from Aliant in 2005. The Company does not anticipate any significant changes in the pattern of planned expenditures by origin.

While planned capital expenditures are forecast to be relatively stable during the 2005 through 2009 period, circumstances can change and, as a result the maximum capital budget could approximate \$60 million. The Company accepts the Board's view of the desirable effects of stable year to year capital expenditures, and projects will be prioritized accordingly.

Newfoundland Power Inc. 2005 Capital Budget Plan (000s)

<u>Category</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Energy Supply	\$3,361	\$7,494	\$6,625	\$3,771	\$5,651
Substations	3,037	5,433	6,799	5,316	5,402
Transmission	2,597	5,154	5,189	5,263	5,054
Distribution	28,635	24,743	23,431	23,818	23,703
General Property	1,016	1,423	1,334	900	865
Transportation	2,642	2,987	2,650	2,810	2,411
Telecommunications	60	422	268	456	423
Information Systems	3,243	3,598	3,483	3,648	3,558
Unforeseen Items	750	750	750	750	750
General Expenses Capital	2,800	2,800	2,800	2,800	2,800
Total	\$48,141	\$54,804	\$53,329	\$49,532	\$50,617

ENERGY SUPPLY

<u>Project</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Hydro Plants – Facility Rehabilitation	\$1,887	\$1,851	\$1,216	\$3,771	\$2,641
Wesleyville Gas Turbine Overhaul	1,124	-	-	-	-
Rattling Brook - Hydro Plant Refurbishment	350	5,643	5,409	-	-
Hydro Plant – Penstock Replacement	-	-	-	-	3,010
Total - Energy Supply	\$3,361	\$7,494	\$6,625	\$3,771	\$5,651

SUBSTATIONS

<u>Project</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Rebuild Substations	\$351	\$429	\$1,093	\$1,642	\$1,969
Replacement and Standby Substation Equipment	1,052	1,201	2,433	2,194	2,100
Transformer Cooling Refurbishment	174	300	200	200	200
Protection and Monitoring Improvements	78	625	280	280	133
Distribution System Feeder Remote Control	1,114	1,024	1,000	1,000	1,000
Feeder Additions Due To Load Growth and Reliability	268	412	380	-	-
Additional Transformer – Glendale	-	1,442	-	-	-
New Substation – Humber Valley	-	-	1,413	-	-
Total – Substations	\$3,037	\$5,433	\$6,799	\$5,316	\$5,402

TRANSMISSION

<u>Project</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Rebuild Transmission Lines	\$2,597	\$5,154	\$5,189	\$5,263	\$5,054
Total – Transmission	\$2,597	\$5,154	\$5,189	\$5,263	\$5,054

DISTRIBUTION

<u>Project</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Extensions	\$6,374	\$5,581	\$5,497	\$5,426	\$5,508
Meters	965	819	802	936	741
Services	1,895	1,820	1,802	1,816	1,855
Street Lighting	1,254	1,107	1,095	1,100	1,118
Transformers	5,189	4,700	4,648	4,601	4,549
Reconstruction	2,825	5 3,064 2,927		3,429 3,497	
Aliant Pole Purchase	4,044	-	-	-	-
Trunk Feeders Rebuild Distribution Lines Relocate/Replace Distribution Lines For Third Parties Distribution Reliability Initiative	4,210 734 872	5,347 435 1,568	5,050 435 1,000	4,900 435 1,000	4,900 435 1,000
Feeder Additions and Upgrades to Accommodate Growth	173	202	75	75	-
Interest During Construction	100	100	100	100	100
Total – Distribution	\$28,635	\$24,743	\$23,431	\$23,818	\$23,703

GENERAL PROPERTY

<u>Project</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Tools and Equipment	\$691	\$505	\$415	\$415	\$415
Additions to Real Property	325	918	919	485	450
Total – General Property	\$1,016	\$1,423	\$1,334	\$900	\$865

TRANSPORTATION

<u>Project</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Purchase Vehicles and Aerial Devices	\$2,642	\$2,987	\$2,650	\$2,810	\$2,411
Total – Transportation	\$2,642	\$2,987	\$2,650	\$2,810	\$2,411

TELECOMMUNICATIONS

<u>Project</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Replace/Upgrade Communications Equipment	\$60	\$75	\$81	\$195	\$85
SCADA Infrastructure	-	74	-	-	-
Fibre Optic Networking	-	273	187	261	338
Total – Telecommunications	\$60	\$422	\$268	\$456	\$423

INFORMATION SYSTEMS

<u>Project</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Application Enhancements	\$1,087	\$1,377	\$1,097	\$958	\$1,170
Application Environment	710	701	861	1,060	911
Customer Systems Replacement	144	170	175	175	176
Network Infrastructure	276	50	50	150	50
Personal Computer Infrastructure	455	550	550	555	550
Shared Server Infrastructure	571	750	750	750	701
Total – Information Systems	\$3,243	\$3,598	\$3,483	\$3,648	\$3,558

UNFORESEEN ITEMS

<u>Project</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Allowance for Unforeseen Items	\$750	\$750	\$750	\$750	\$750
Total – Unforeseen Items	\$750	\$750	\$750	\$750	\$750

GENERAL EXPENSES CAPITAL

Project	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Allowance for General Expenses Capital	\$2,800	\$2,800	\$2,800	\$2,800	\$2,800
Total – General Expenses Capital	\$2,800	\$2,800	\$2,800	\$2,800	\$2,800

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, 78 and 80 of the Act:

- (a) approving its 2005 Capital Budget of \$48,141,000;
- (b) (i) fixing and determining its average rate base for 2003 in the amount of \$675,730,000; (ii) approving its revised forecast average rate base for 2004 in the amount of \$713,072,000; and (iii) approving its forecast average rate base for 2005 in the amount of \$740,142,000; and
- (c) approving revised values for rate base and invested capital for use in the automatic adjustment formula (the "Automatic Adjustment Formula") for the calculation of return on rate base for 2005 pursuant to Order No. P.U. 19 (2003).

2004 Capital Expenditure Status Report

August 31, 2004



NEWFOUNDLAND POWER INC.

2005 CAPITAL BUDGET APPLICATION

2004 Capital Expenditure Status Report

Explanatory Note

This report is presented in compliance with the directive of the Board of Commissioners of Public Utilities (the "Board") contained in paragraph 4 of Order No. P.U. 35 (2003).

Page 1 of the 2004 Capital Expenditure Status Report outlines the forecast variances from budget of the capital expenditures approved by the Board in Order No. P.U. 35 (2003). The detailed tables on pages 2 to 12 provide additional detail on capital expenditures in 2004, and also include information on those capital projects approved for 2002 and 2003 that were not completed prior to 2004.

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 2004 Capital Expenditure Status Report.

Capital expenditures that have been deferred to 2005 are shown in Column K on the attached report.

Newfoundland Power Inc. 2005 Capital Budget

2004 Capital Budget Variances (000s)

	Approved by Order No. <u>P.U. 35 (2003)</u>	Forecast ⁽¹⁾	<u>Variance</u>
Energy Supply	\$5,245	\$5,928	\$683
Substations	5,199	4,938	(261)
Transmission	2,315	2,503	188
Distribution	27,636	30,102	2,466
General Property	709	845	136
Transportation	3,487	3,487	-
Telecommunications	120	114	(6)
Information Systems	3,948	3,894	(54)
Unforeseen Items	750	750	-
General Expenses Capital	_2,800	2,800	<u>-</u>
Total	\$ <u>52,209</u>	\$ <u>55,361</u>	\$ <u>3,152</u>
Projects carried forward from 2002 & 2003	-	3,790	

^{1.} Includes deferral to 2005.

		Capital	Budget		Actual Expenditures				Forecast				
	2002 A	2003 B	2004 C	<u>Total</u> D	2002 E	2003 F	YTD 2004 G	Total <u>To Date</u> H	Remainder of 2004 I	Total 2004 J	Deferrals K	Overall Total L	Variance M
2004 Projects	\$ -	\$ -	\$ 52,209	\$ 52,209	\$ -	\$ -	\$ 27,286	\$ 27,286	\$ 25,907	\$ 53,193	\$ 2,168	\$ 55,361	\$ 3,152
2003 Projects	-	15,425	-	15,425	50	13,104	1,867	15,021	590	2,457	500	16,111	686
2002 Projects	3,674	-	-	3,674	1,404	2,769	601	4,774	232	833	-	5,006	1,332
Grand Total	\$ 3,674	\$ 15,425	\$ 52,209	\$ 71,308	\$ 1,454	\$ 15,873	\$ 29,754	\$ 47,081	\$ 26,729	\$ 56,483	\$ 2,668	\$ 76,478	\$ 5,170

Column A Approved Capital Budget for 2002 Column B Approved Capital Budget for 2003 Column C Approved Capital Budget for 2004 Column D Total of Columns A, B and C Column E Actual Capital Expenditures for 2002 Column F Actual Capital Expenditures for 2003 Column G YTD Actual Capital Expenditures for 2004 Column H Total of Columns E, F and G Column I Forecast Capital Expenditures for Remainder of 2004 Total of Column G and I Column J Column K Capital Projects Deferred to 2005 Column L Total of Column H, I and K Column M Column L less Column D

Category: Energy Supply

	Capital Budget											Actual Ex	pendi	itures						For	ecast					
Project	2	002		2003	2	004		Total	2	002		2003		YTD 2004		Total o Date		nainder f 2004		Total 2004	Def	ferrals	Overall Total	Va	riance	Notes*
		Α		в		С		D		Е		F		G		н		I		J		к	L		М	
2004 Projects																										
Hydro Plants - Facility Rehabilitation	\$	-	\$	-	\$	1,122	\$	1,122	\$	-	\$	-	\$	263	\$	263	\$	1,071	\$	1,334	\$	40	\$ 1,374	\$	252	1
New Chelsea - Hydro Plant Refurbishment		-		-		3,973		3,973		-		-		1,311		1,311		2,678		3,989		375	4,364		391	2
Major Electrical Equipment Repairs		-		-		150		150		-		-		133	_	133	_	57		190		-	 190		40	3
		-		-		5,245		5,245		-		-		1,707		1,707		3,806		5,513		415	 5,928		683	
2003 Projects																										
Hydro Plants - Facility Rehabilitation		-		2,345		-		2,345		-		2,028		161		2,189		324		485		-	2,513		168	4
Purchase Portable Diesel Generation		-		1,500		-		1,500		-		589		1,151		1,740		78		1,229		-	1,818		318	5
		-		3,845		-		3,845	-	-	-	2,617	-	1,312		3,929	-	402	-	1,714		-	 4,331	-	486	
2002 Projects																										
Wesleyville Gas Turbine Relocation		1,674		-		-		1,674		1,356		1,416		458		3,230		3		461		-	3,233		1,559	6
Total - Energy Supply	\$	1,674	\$	3,845	\$	5,245	\$	10,764	\$	1,356	\$	4,033	\$	3,477	\$	8,866	\$	4,211	\$	7,688	\$	415	\$ 13,492	\$	2,728	

* See Appendix A for notes containing variance explanations.

- Column A Approved Capital Budget for 2002
- Column B Approved Capital Budget for 2003
- Column C Approved Capital Budget for 2004
- Column D Total of Columns A, B and C
- Column E Actual Capital Expenditures for 2002
- Actual Capital Expenditures for 2003 Column F
- Column G YTD Actual Capital Expenditures for 2004
- Column H Total of Columns E, F and G
- Column I Forecast Capital Expenditures for Remainder of 2004
- Column J Total of Column G and I
- Column K Capital Projects Deferred to 2005 Total of Column H, I and K
- Column L Column M Column L less Column D

Category: Substations

			Capita	Budget					А	ctual Ex	pend	itures			For	ecast				
Project	200	2	2003 B	<u>2004</u> C	1	<u>Fotal</u>	<u>20</u>		-	003 F		YTD 2004 G	Fotal o Date H	ainder 004	Total 2004	Def	ferrals K	Dverall Total	 riance	Notes*
			-	-		-	-	-		-				-	-			-		
2004 Projects																				
Rebuild Substations	\$	-	\$ -	\$ 1,023	\$	1,023	\$	-	\$	-	\$	204	\$ 204	\$ 327	\$ 531	\$	387	\$ 918	\$ (105)	7
Replacement and Standby Substation Equipment		-	-	1,314		1,314		-		-		810	810	404	1,214		69	1,283	(31)	
Transformer Cooling Refurbishment		-	-	398		398		-		-		17	17	276	293		-	293	(105)	8
Protection and Monitoring Improvements		-	-	80		80		-		-		21	21	39	60		-	60	(20)	9
Distribution System Feeder Remote Control		-	-	1,000		1,000		-		-		877	877	123	1,000		-	1,000	-	
Feeder Additions Due to Load Growth and																				
Reliability		-	-	200		200		-		-		80	80	120	200		-	200	-	
Increase Corner Brook Transformer Capacity		-	-	1,184		1,184		-		-		206	206	978	1,184		-	1,184	-	
		-	-	5,199		5,199		-		-		2,215	 2,215	 2,267	 4,482		456	 4,938	 (261)	
2003 Projects																				
Replacement and Spare Substation Equipment		-	1,107	-		1,107		-		1,016		21	1,037	52	73		-	1,089	(18)	
Reliability and Power Quality Improvements		-	198	-		198		-		76		2	78	12	14		101	191	(10)	
Chamberlains - Add 66/25kV Transformer		-	1,250	-		1,250		-		1,076		50	1,126		50		-	1,126	(124)	10
Virginia Waters - Add 66/12.5 kV Transformer		-	1,150	-		1,150		-		901		156	1,057	-	156			1,057	(93)	11
		-	3,705	-		3,705		-		3,069		229	 3,298	 64	 293		101	3,463	 (242)	
2002 Projects																				
Purchase Power Transformer	2	,000	-	-		2,000		48		1,353		143	1,544	229	372		-	1,773	(227)	12
Total - Substations	\$ 2	,000	\$ 3,705	\$ 5,199	\$	10,904	\$	48	\$	4,422	\$	2,587	\$ 7,057	\$ 2,560	\$ 5,147	\$	557	\$ 10,174	\$ (730)	

* See Appendix A for notes containing variance explanations.

Column A Approved Capital Budget for 2002 Column B Approved Capital Budget for 2003 Approved Capital Budget for 2004 Column C Total of Columns A, B and C Column D Column E Actual Capital Expenditures for 2002 Column F Actual Capital Expenditures for 2003 YTD Actual Capital Expenditures for 2004 Column G Total of Columns E, F and G Column H Column I Forecast Capital Expenditures for Remainder of 2004 Total of Column G and I Column J Column K Capital Projects Deferred to 2005 Column L Total of Column H, I and K Column M Column L less Column D

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2004 Capital Expenditure Status Report (000s)

Category: Transmission

			Capita	l Budg	et	Actual Expenditures Forecast																	
Project	<u>2002</u> 2003 2004 Total A B C D		2	E		2003 F		YTD 2004 G		Total o Date H		nainder 2004 I	Total 2004 J	De	ferrals K	Overall Total L	Va	nriance M	Notes*				
2004 Projects Rebuild Transmission Lines	\$	-	\$ -	\$	2,315	\$ 2,315	\$	-	\$	-	\$	569	\$	569	\$	1,737	\$ 2,306	\$	197	\$ 2,503	\$	188	13
2003 Projects Rebuild Transmission Lines		-	4,129		-	4,129		50		4,026		62		4,138		33	95		-	4,171		42	
Total - Transmission	\$	-	\$ 4,129	\$	2,315	\$ 6,444	\$	50	\$	4,026	\$	631	\$	4,707	\$	1,770	\$ 2,401	\$	197	\$ 6,674	\$	230	

* See Appendix A for notes containing variance explanations.

Column A	Approved Capital Budget for 2002
Column B	Approved Capital Budget for 2003
Column C	Approved Capital Budget for 2004
Column D	Total of Columns A, B and C
Column E	Actual Capital Expenditures for 2002
Column F	Actual Capital Expenditures for 2003
Column G	YTD Actual Capital Expenditures for 2004
Column H	Total of Columns E, F and G
Column I	Forecast Capital Expenditures for Remainder of 2004
Column J	Total of Column G and I
Column K	Capital Projects Deferred to 2005
Column L	Total of Column H, I and K
Column M	Column L less Column D

Category: Distribution

			Capital	Budget			Actual Ex	penditures			For	ecast			
								YTD	Total	Remainder	Total		Overall		
Project	2002		2003	2004	Total	2002	2003	2004	To Date	2004	2004	Deferrals	Total	Variance	Notes*
	Α		в	С	D	Е	F	G	н	I	1	К	L	М	
2004 Projects															
Extensions	\$	- \$	-	\$ 4,956	\$ 4,956	\$ -	\$ -	\$ 3,354	\$ 3,354	\$ 3,500	\$ 6,854	\$ -	\$ 6,854	\$ 1,898	14
Meters		-	-	1,174	1,174	-	-	874	874	413	1,287	-	1,287	113	15
Services		-	-	1,946	1,946	-	-	789	789	1,087	1,876	-	1,876	(70)	16
Street Lighting		-	-	1,242	1,242	-	-	647	647	497	1,144	100	1,244	2	
Transformers		-	-	4,965	4,965	-	-	3,848	3,848	1,492	5,340	-	5,340	375	17
Reconstruction		-	-	2,461	2,461	-	-	1,372	1,372	1,068	2,440	-	2,440	(21)	
Aliant Pole Purchase		-	-	4,044	4,044	-	-	4,044	4,044	-	4,044	-	4,044	-	
Trunk Feeders															
Rebuild Distribution Lines		-	-	4,137	4,137	-	-	2,282	2,282	1,634	3,916	200	4,116	(21)	
Relocate/Replace Distribution Lines For Third Parties		-	-	235	235	-	-	251	251	369	620	-	620	385	18
Distribution Reliability Initiative		-	-	949	949	-	-	631	631	258	889	120	1,009	60	19
Feeder Additions and Upgrades to Accommodate Growth		-	-	677	677	-	-	100	100	444	544	80	624	(53)	20
Switch Replacement and Upgrade Underground															
Distribution - Water Street, St. John's		-	-	750	750	-	-	77	77	471	548	-	548	(202)	21
Interest During Construction			-	100	100			26	26	74	100		100		
		-	-	27,636	27,636	-	-	18,295	18,295	11,307	29,602	500	30,102	2,466	
2003 Projects															
Rebuild Distribution Lines		-	3,504	-	3,504	-	3,351	174	3,525	91	265	399	4,015	511	22
Total - Distribution	\$	- \$	3,504	\$ 27,636	\$ 31,140	<u>\$</u> -	\$ 3,351	\$ 18,469	\$ 21,820	\$ 11,398	\$ 29,867	\$ 899	\$ 34,117	\$ 2,977	

* See Appendix A for notes containing variance explanations.

Approved Capital Budget for 2002 Approved Capital Budget for 2003 Column A Column B Column C Approved Capital Budget for 2004 Column D Total of Columns A, B and C Column E Actual Capital Expenditures for 2002 Actual Capital Expenditures for 2003 Column F YTD Actual Capital Expenditures for 2004 Column G Total of Columns E, F and G Column H Forecast Capital Expenditures for Remainder of 2004 Column I Total of Column G and I Column J Capital Projects Deferred to 2005 Column K Column L Total of Column H, I and K Column M Column L less Column D

Category: General Property

	Capital Budget										A	tual Ex	pendit	ures			For	ecast					
Project	200)2	20	003	2	2004	1	otal	20	002	20	03		YTD 2004	fotal Date	ainder 004	otal 2004	Defe	errals	verall Total	-	iance	Notes*
	А			в		C		D		E		F		G	н	1	J	1	ĸ	L	N	м	
2004 Projects Tools and Equipment Additions to Real Property	\$	-	\$	-	\$	535 174	\$	535 174	\$	-	\$	-	\$	334 113	\$ 334 113	\$ 240 158	\$ 574 271	\$	-	\$ 574 271	\$	39 97	23
Total - General Property	\$		\$	-	\$	709	\$	709	\$	-	\$	-	\$	447	\$ 447	\$ 398	\$ 845	\$	-	\$ 845	\$	136	

* See Appendix A for notes containing variance explanations.

Column A	Approved Capital Budget for 2002
Column B	Approved Capital Budget for 2003
Column C	Approved Capital Budget for 2004
Column D	Total of Columns A, B and C
Column E	Actual Capital Expenditures for 2002
Column F	Actual Capital Expenditures for 2003
Column G	YTD Actual Capital Expenditures for 2004
Column H	Total of Columns E, F and G
Column I	Forecast Capital Expenditures for Remainder of 2004
Column J	Total of Column G and I
Column K	Capital Projects Deferred to 2005
Column L	Total of Column H, I and K
Column M	Column L less Column D

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2004 Capital Expenditure Status Report (000s)

Category: Transportation

				Capita	l Budg	get	Actual Expenditures Forecast																		
<u>Project</u>	200	02	20	003		2004	 Total		2002	_	20	03		YTD 2004		fotal Date		mainder 2004	Total 2004	De	ferrals	Overall Total		iance	Notes*
	А			В		С	D		Е		1	F		G		н		I	J		К	L	1	м	
2004 Projects Purchase Vehicles and Aerial Devices	\$	-	\$	-	\$	3,487	\$ 3,487	\$		-	\$	-	\$	556	\$	556	\$	2,331	\$ 2,887	\$	600	\$ 3,487	\$	-	
Total - Transportation	\$	-	\$	-	\$	3,487	\$ 3,487	\$		-	\$	-	\$	556	\$	556	\$	2,331	\$ 2,887	\$	600	\$ 3,487	\$	-	

* See Appendix A for notes containing variance explanations.

Column A Approved Capital Budget for 2002 Column B Approved Capital Budget for 2003 Approved Capital Budget for 2004 Column C Column D Total of Columns A, B and C Actual Capital Expenditures for 2002 Column E Actual Capital Expenditures for 2003 Column F YTD Actual Capital Expenditures for 2004 Column G Column H Total of Columns E, F and G Column I Forecast Capital Expenditures for Remainder of 2004 Total of Column G and I Column J Column K Capital Projects Deferred to 2005 Column L Total of Column H, I and K Column M Column L less Column D

Category: Telecommunications

			Capital	l Budge	et				1	Actual E	xpen	ditures		Forecast									
Project	20	02 A	 2003 B	2	с С	1	Fotal D	 002 E		2003 F		YTD 2004 G	otal Date н	Remainder Total 2004 2004 I J				Def	ferrals K		overall Total L	 riance M	Notes*
2004 Projects Replace/Upgrade Communications Equipment Substation Telephone Circuit Protection	\$	- - -	\$ -	\$	70 50 120	\$	70 50 120	\$ -	\$	-	\$	17 17	\$ <u>17</u> 17	\$	70 27 97	\$	70 44 114	\$	-	\$	70 44 114	\$ (6) (6)	24
2003 Projects Replace/Upgrade Communications Equipment		-	242		-		242	-		41		90	131		-		90		-		131	(111)	25
Total - Telecommunications	\$	-	\$ 242	\$	120	\$	362	\$ -	\$	41	\$	107	\$ 148	\$	97	\$	204	\$	-	\$	245	\$ (117)	

* See Appendix A for notes containing variance explanations.

Approved Capital Budget for 2002 Column A Column B Approved Capital Budget for 2003 Column C Approved Capital Budget for 2004 Total of Columns A, B and C Column D Actual Capital Expenditures for 2002 Column E Column F Actual Capital Expenditures for 2003 Column G YTD Actual Capital Expenditures for 2004 Total of Columns E, F and G Column H Column I Forecast Capital Expenditures for Remainder of 2004 Total of Column G and I Column J Capital Projects Deferred to 2005 Column K Column L Total of Column H, I and K Column M Column L less Column D

Category: Information Systems

			Capita	l Bud	get			Act	tual Ex	pendi	itures		Forecast										
Project	2002	2	2003		2004	Total	2002	200	13		YTD 2004	Total o Date		1ainder 2004		Fotal 2004	De	ferrals		Overall Total	V۶	riance	Notes*
	A		 В		С	 D	 E	 F			G	 Н		I		J		К		L		М	
2004 Projects																							
Application Enhancements	\$	-	\$ -	\$	1,355	\$ 1,355	\$ -	\$ 5	-	\$	578	\$ 578	\$	741	\$	1,319	\$	-	\$	1,319	\$	(36)	
Application Environment		-	-		791	791	-		-		412	412		399		811		-		811		20	
Customer Systems Replacement		-	-		226	226	-		-		118	118		108		226		-		226		-	
Network Infrastructure		-	-		393	393	-		-		144	144		249		393		-		393		-	
Personal Computer Infastructure		-	-		539	539	-		-		322	322		137		459		-		459		(80)	26
Shared Server Infastructure		-	-		644	644	-		-		339	339		347		686		-		686		42	
Total - Information Systems	\$	-	\$ -	\$	3,948	\$ 3,948	\$ -	\$ 6	-	\$	1,913	\$ 1,913	\$	1,981	\$	3,894	\$	-	\$	3,894	\$	(54)	

* See Appendix A for notes containing variance explanations.

Approved Capital Budget for 2002 Column A Approved Capital Budget for 2003 Column B Column C Approved Capital Budget for 2004 Column D Total of Columns A, B and C Actual Capital Expenditures for 2002 Column E Actual Capital Expenditures for 2003 Column F Column G YTD Actual Capital Expenditures for 2004 Column H Total of Columns E, F and G Column I Forecast Capital Expenditures for Remainder of 2004 Column J Total of Column G and I Column K Capital Projects Deferred to 2005 Total of Column H, I and K Column L Column M Column L less Column D

Category: Unforeseen Items

				Capita	l Budg	get					Actua	l Exp	enditur	es			For	ecast					
Project	200	2	2	003	;	2004	Т	otal	2	2002	 2003		YT 200		otal Date	nainder 2004	'otal 004	De	ferrals	verall Fotal	Va	riance	Notes*
	Α			в		С		D		Е	F		G		H	I	J		к	L		М	
2004 Projects Allowance for Unforeseen Items	\$	-	\$	-	\$	750	\$	750	\$	-	\$	-	\$	-	\$ -	\$ 750	\$ 750	\$	-	\$ 750	\$	-	
Total - Unforeseen Items	\$	-	\$	-	\$	750	\$	750	\$	-	\$	-	\$	-	\$ -	\$ 750	\$ 750	\$	-	\$ 750	\$		

* See Appendix A for notes containing variance explanations.

Column A	Approved Capital Budget for 2002
Column B	Approved Capital Budget for 2003
Column C	Approved Capital Budget for 2004
Column D	Total of Columns A, B and C
Column E	Actual Capital Expenditures for 2002
Column F	Actual Capital Expenditures for 2003
Column G	YTD Actual Capital Expenditures for 2004
Column H	Total of Columns E, F and G
Column I	Forecast Capital Expenditures for Remainder of 2004
Column J	Total of Column G and I
Column K	Capital Projects Deferred to 2005
Column L	Total of Column H, I and K
Column M	Column L less Column D

Category: General Expenses Capital

				Capita	l Bud	get				Act	ual Ex	pendi	itures			For	ecast			_			
Project	2002		20	003		2004	 Total	 2002		200	3		YTD 2004	Total To Date	nainder 2004	Fotal 2004	De	ferrals	Overall Total	v	'ariance	N	otes*
	Α			В		С	D	Е		F			G	н	I	J		К	L		М		
2004 Projects Allowance for General Expenses Capital	\$	-	\$	-	\$	2,800	\$ 2,800	\$	-	\$	-	\$	1,567	\$ 1,567	\$ 1,233	\$ 2,800	\$	-	\$ 2,800	\$	-		
Total - General Expenses Capital	\$	-	\$	-	\$	2,800	\$ 2,800	\$	-	\$	-	\$	1,567	\$ 1,567	\$ 1,233	\$ 2,800	\$	-	\$ 2,800	\$			

* See Appendix A for notes containing variance explanations.

Column A	Approved Capital Budget for 2002
Column B	Approved Capital Budget for 2003
Column C	Approved Capital Budget for 2004
Column D	Total of Columns A, B and C
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Column G	YTD Actual Capital Expenditures for 2004
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Column K	Capital Projects Deferred to 2005
Column L	Total of Column H, I and K
Column M	Column L less Column D

Energy Supply

1.	Hydro Plants - Facility R	ehabilitation:	
	Budget: \$1,122,000	Forecast: \$1,374,000	Variance: \$252,000

The variance is primarily the result of implementing demand metering in plants for the Hydro demand-energy rate, installing fire and intruder alarms in our hydro plant buildings and an increase in the Rattling Brook generator rewind. Demand metering in the plants is required to implement a demand-energy rate for Hydro's billing of Newfoundland Power. The alarms project was not originally included in the budget for 2004 as the requirement for the alarms was only recently identified after completion of independent risk inspections of the various plants. The increase in the Rattling Brook generator rewind project is a result of higher than anticipated bids from contractors.

2.New Chelsea - Hydro Plant Refurbishment:
Budget: \$3,973,000Variance: \$391,000Variance: \$391,000

There will be an increased expenditure on this project as a result of increased steel prices for penstock pipe of \$180,000, increased engineering labour and material costs of \$130,000 associated with required temporary substation equipment protection, and increased contract costs of \$80,000 associated with the electrical and mechanical equipment installation. The requirement for temporary protection was identified during the detailed engineering assessment.

Scheduling and contracting constraints made it difficult to cost effectively perform the generator rewind in 2004. Consequently, an expenditure of \$375,000 related to this aspect of the project has been deferred to 2005.

3.Major Electrical Equipment Repairs:
Budget: \$150,000Variance: \$40,000Variance: \$40,000

The variance is the result of higher than anticipated costs to repair the mobile gas turbine unit located at Grand Bay Substation.

4.Hydro Plants - Facility Rehabilitation (2003 Project):
Budget: \$2,345,000Variance: \$168,000Variance: \$168,000

The variance is the result of higher than anticipated costs to replace the governor at the Tors Cove hydroelectric plant and commissioning the unit for service.

Energy Supply

5.	Purchase Portable Diese	l Generation (2003 Project):	
	Budget: \$1,500,000	Forecast: \$1,818,000	Variance: \$318,000

The variance is due to a higher than expected contract price for the purchase of the diesel generator.

6.Wesleyville Gas Turbine Relocation (2002 Project):
Budget: \$1,674,000Variance: \$1,559,000Variance: \$1,559,000

The variance is the result of several factors relating to delays in completing the project and additional necessary work identified prior to installation of the equipment at Wesleyville. The budget was based on a contract labour cost of \$350,000 consistent with bids received in early 2002. Following the decision to postpone relocation and retendering in 2003 the contract cost to relocate the gas turbine increased by \$420,000 to \$770,000. The postponement of the project also resulted in additional IDC charges of \$96,000. Assessment of equipment during dismantling identified several items requiring replacement or refurbishment as recommended by the contractor and original equipment manufacturer resulting in additional scope of work costing \$580,000. This included replacement of the alternator air cooling system, exhaust volute, speed switches, fuel pumping system, installation of a fuel leak detection system and refurbishment of the power turbine inlet cone, exhaust stack structure, lube oil cooling system and other items as well as resolving problems with the gear box. This additional scope of work along with delays in completing the project resulted in additional engineering and project management and supervision costs totaling \$460,000.

The gas turbine was relocated and commissioned for operation at the end of the 4th quarter, 2003. The work associated with upgrading the lube oil cooling system, fuel system, and providing remote control was completed in the 2nd quarter of 2004. With this, the Wesleyville Gas Turbine Relocation Project is completed.

Substations

7.Rebuild Substations:
Budget: \$1,023,000Forecast: \$918,000

Variance: (\$105,000)

This variance is the result of cancelling site work at the Trepassey Substation that would have been required to accommodate the installation of the proposed new portable diesel generator. With the removal of the diesel generator from the budget, the proposed site work was no longer necessary.

8.Transformer Cooling Refurbishment:
Budget: \$398,000Variance: (\$105,000)Variance: (\$105,000)

This variance stems from the Company's decision to reduce the number of transformer radiators to be refurbished in 2004. The reduction reflects a review of the Company's overall capital expenditure plan for 2004 and a re-prioritization of some projects.

9.Protection and Monitoring Improvements:
Budget: \$80,000Variance: (\$20,000)Variance: (\$20,000)

This variance stems from the Company's decision to reduce the number of tap changer control installations scheduled for 2004. The reduction reflects a review of the Company's overall capital expenditure plan for 2004 and a re-prioritization of some projects.

 10.
 Chamberlains - Add 66/25kV Transformer (2003 Project):

 Budget: \$1,250,000
 Forecast: \$1,126,000
 Variance: (\$124,000)

The variance is the result of lower than anticipated pricing for the power transformer following a competitive bidding process.

 11.
 Virginia Waters - Add 66/12.5kV Transformer (2003 Project):

 Budget: \$1,150,000
 Forecast: \$1,057,000
 Variance: (\$93,000)

The variance is the result of lower than anticipated pricing for the power transformer following a competitive bidding process.

Substations

12.	Purchase Power Transfor	mer (2002 Project):	
	Budget: \$2,000,000	Forecast: \$1,773,000	Variance: (\$227,000)

The variance is the result of lower than anticipated pricing for the power transformer following a competitive bidding process.

Transmission

13.Rebuild Transmission Lines:
Budget: \$2,315,000Forecast: \$2,503,000

Variance: \$188,000

The variance is the result of a higher than expected number of third party requests to relocate transmission lines.

Distribution

14. Extensions:

Budget: \$4,956,000

Forecast: \$6,854,000

Variance: \$1,898,000

The increase in the Extensions category is primarily related to customer driven projects, both commercial and residential. Examples of significant projects include the Humber Valley Resort development in the Corner Brook area, the INCO (Voisey's Bay) demonstration plant site at Argentia, and a line extension for various services previously served by the distribution system operated by the Argentia Management Authority.

 15.
 Meters:

 Budget: \$1,174,000
 Forecast: \$1,287,000
 Variance: \$113,000

Completion of the sample testing of meters specified by Measurement Canada resulted in a higher than anticipated number of residential meters having to be removed from service. Consequently, a further \$100,000 was required for the purchase of additional meters.

 16.
 Services:

 Budget: \$1,946,000
 Forecast: \$1,876,000
 Variance: (\$70,000)

The variance is primarily a result of a lower than expected requirement for both new and replacement services in the Avalon operating area.

17. Transformers: Budget: \$4,965,000

Forecast: \$5,340,000

Variance: \$375,000

The increase in the Transformers category reflects additional requirements for padmount transformers, primarily due to customer related growth.

Distribution

18.	Relocate/Replace Distri	ibution Lines For Third Parties:	
	Budget: \$235,000	Forecast: \$620,000	Variance: \$385,000

The variance is the result of a higher than expected number of third party requests to relocate distribution lines. The relocations relate to road realignment work being completed by the Department of Transportation and Works, as well as replacements required by the cable television companies.

19.Distribution Reliability Initiative:
Budget: \$949,000Forecast: \$1,009,000Variance: \$60,000

The variance relates to higher than expected costs associated with the construction of a new feeder from Pulpit Rock Substation.

20.Feeder Additions and Upgrades to Accommodate Growth:
Budget: \$677,000Variance: (\$53,000)Variance: (\$53,000)

The reduction in forecast for this category is primarily the result of the postponement of a project to install voltage regulators on Springfield-01 feeder due to load growth being less than expected.

21.Switch Replacement and Upgrade Underground Distribution - Water Street, St. Johns:
Budget: \$750,000Forecast: \$548,000Variance: (\$202,000)

This project is now complete. The variance is a result of the Company's determination that a smaller than anticipated number of distribution vaults required upgrading.

Distribution

22.Rebuild Distribution Lines (2003 Project):
Budget: \$3,504,000Forecast: \$4,015,000Variance: \$511,000

At the end of 2003, this 2003 capital project showed a variance below budget of approximately \$153,000, which was the net effect of the deferral of two individual projects and increased costs on several rebuild projects completed in 2003.

The current forecast variance over budget principally reflects the planned completion of the two deferred projects, to be completed in 2004 and 2005. These projects are the rebuild of St. John's feeder KBR-08 and an extension of feeder GLV-02 to Charlottetown. The forecast total expenditure for these two projects has increased from approximately \$440,000 to approximately \$625,000. The KBR-08 project is to be completed in 2004. The forecasted increase is largely due to the cost of addressing environmental issues on the portion of GLV-02 that runs through Terra Nova National Park, which will be completed in 2005.

General Property

23. Additions to Real Property: Budget: \$174,000 Forecast: \$271,000

Variance: \$97,000

The variance is the result of several expenditure requirements that were not identified at the time the budget was developed. These consisted of building upgrades at Duffy Place, an upgrade of the fire suppression system at the Kenmount Road building, and upgrading of the elevators at both the Duffy Place and Kenmount Road buildings to address safety concerns.

Telecommunications

24.	Substation Telephone Circuit	Protection:
	Budget: \$50,000	Forecast: \$44,000

Variance: (\$6,000)

This variance is the result of lower than expected costs to complete the installation of telephone circuit protection equipment.

25.Replace/Upgrade Communications Equipment (2003 Project):
Budget: \$242,000Forecast: \$131,000Variance: (\$111,000)

The variance is due in part to the replacement of the UHF radio system in central Newfoundland with a lower cost fibre optic cable solution from Aliant Communications. In addition, the cost incurred while addressing deficiencies on the substation protection equipment were less than anticipated due to positive results during equipment inspections.

Information Systems

26.Personal Computer Infrastructure:
Budget: \$539,000Variance: (\$80,000)Variance: (\$80,000)

The reduction in this project reflects lower than anticipated costs for the purchase and installation of personal computers. The reduction in purchase costs reflects a somewhat general downward trend in the industry for PC pricing. The reduced installation costs result from changes in the technology used to complete PC installations that allows for faster installation.

IN THE MATTER OF the Public

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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, 78 and 80 of the Act:

- (a) approving its 2005 Capital Budget of \$48,141,000;
- (b) (i) fixing and determining its average rate base for 2003 in the amount of \$675,730,000; (ii) approving its revised forecast average rate base for 2004 in the amount of \$713,072,000; and (iii) approving its forecast average rate base for 2005 in the amount of \$740,142,000; and
- (c) approving revised values for rate base and invested capital for use in the automatic adjustment formula (the "Automatic Adjustment Formula") for the calculation of return on rate base for 2005 pursuant to Order No. P.U. 19 (2003).

Report on Deferred Charges and Rate Base



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 at the Company's capital budget hearing. The Board also ordered that Newfoundland Power provide a reconciliation of average rate base to average invested capital annually during the capital budget approval process.

This report provides evidence with respect to changes in deferred charges and the reconciliation of average rate base to average invested capital as ordered by the Board in Order No. P.U. 19 (2003).

DEFERRED CHARGES

General

Table 1 sets out the actual deferred charges to be included in rate base for 2003 and forecast deferred charges for 2004 and 2005.

	Actual	Fo	recast
	<u>2003</u>	<u>2004</u>	<u>2005</u>
Weather Normalization Account	10,435	11,368	10,242
Deferred Regulatory Costs	693	347	0
Unamortized Debt Discount & Expense	3,370	3,171	3,721
Unamortized Capital Stock Issue Expense	392	325	261
Deferred Pension Costs	72,787	<u>79,218</u>	<u>85,973</u>
Total Deferred Charges	87,677	<u>94,429</u>	<u>100,197</u>

Table 1 Deferred Charges: 2003-2005F (\$000s)

The 2004 forecast for deferred charges is approximately \$1.4 million higher than the 2004 forecast filed in the Company's 2003 General Rate Application due to the normal operation of the weather normalization account (\$1.9 million) offset by a reduction in deferred pension costs (\$0.5 million).

Unamortized Debt Discount and Expense is expected to increase in 2005 relating to a \$75 million issue of 30-year first mortgage bonds forecast for late 2005.

There is a slight change in Deferred Regulatory Costs for 2004 in comparison to the forecast included in the 2003 General Rate Application. The change reflects the finalization of the regulatory costs deferred. There are no changes in the forecast for Unamortized Capital Stock Issue Expense 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 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 shown in Table 2.

Table 2Weather Normalization Account: 2003-2005F(\$000s)

	<u>2003</u>	<u>2004F</u>	Change 2004F vs. <u>2003</u>	<u>2005F</u>	Change 2005F vs. <u>2004F</u>
Hydro Production Equalization Reserve	9,166	8,740	(426)	7,614	(1,126)
Degree Day Normalization Reserve	<u>1,269</u>	2,628	<u>1,359</u>	<u>2,628</u>	0
Total	10,435	<u>11,368</u>	<u>933</u>	<u>10,242</u>	(1,126)

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. A reduction in the Hydro Production Equalization Reserve of \$1,126,000 in 2003 and the 2004 and 2005 forecasts are reflective of that amortization. The remaining change in the Hydro Production Equalization Reserve in 2004 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. The difference between normal weather and weather actually experienced to the end of July 2004 has been reflected in the 2004 forecast. The 2004 and 2005 forecasts assume normal weather conditions from August 2004 through December 2005.

The functioning of these reserves is governed by orders of the Board; 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. Order No. P.U. 33 (2004) approved the balance in the Weather Normalization Account as of December 31, 2003.

Deferred Regulatory Costs & Other

The reduction in deferred regulatory costs in 2004 and 2005 reflects the incurrence of approximately \$1 million of hearing costs, and their subsequent amortization over three years beginning in 2003 in accordance with Order No. P.U. 19 (2003). The details of the changes are set out in Table 3.

Table 3Deferred Regulatory Costs: 2003-2005F(\$000s)

			Change 2004F		Change 2005F	
	<u>2003</u>	<u>2004F</u>	vs. <u>2003</u>	<u>2005F</u>	vs. <u>2004F</u>	
Deferred Regulatory Costs	693	347	(346)	0	(347)	

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: 2003-2005F (\$000s)

			Change 2004F		Change 2005F
	<u>2003</u>	<u>2004F</u>	vs. <u>2003</u>	<u>2005F</u>	vs. <u>2004F</u>
Unamortized Debt Discount & Expense	3,370	3,171	(199)	3,721	550
Unamortized Capital Stock Issue Expense	392	325	(67)	261	(64)

The decline in the Unamortized Debt Discount & Expense in 2004 reflects the normal amortization of these costs over the life of each debt issue. The increase in amortization for 2005 is related to an expected \$75 million issue of 30-year first mortgage bonds forecast for late 2005, offset by the normal amortization of existing debt issue costs. Issue expenses for the new bond financing are forecast to be 1% of face value, or \$750,000.

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 for 2003 are unchanged from those forecast in the Company's 2003 General Rate Application. Forecast changes in deferred pension costs for 2004 and 2005 are set out in Table 5.

Table 5Forecast Deferred Pension Costs: 2004-2005(\$000s)

	<u>2004F</u>	<u>2005F</u>
Deferred pension costs, January 1 st	<u>72,787</u>	<u>79,218</u>
Pension plan funding		
- Current service funding	3,367	3,594
- Special funding	6,384	6,384
Total pension plan funding	9,751	9,978
Pension plan expense	<u>(3,320)</u>	(3,223)
Increase in deferred pension costs	<u>6,431</u>	<u>6,755</u>
Deferred pension costs, December 31 st	<u>79,218</u>	<u>85,973</u>

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 refers to additional pension funding requirements to address increases in the unfunded liability in the pension plan since its inception. The status of the unfunded liability 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 expense is subject to changes based upon the following factors:

1. The final pension plan expense for 2005 can only be determined early in 2005, once actual pension plan asset balances are known. This determination is made based on the December 31, 2004 market value of pension plan assets in accordance with CICA Handbook recommendations and Order No. P.U. 19 (2003).

2. The discount rate required to be used under the CICA Handbook rules to calculate 2005 pension expense is the actual market rate of interest as at December 31, 2004.

While pension plan expense for 2004 and 2005 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.

Pension plan funding is considered in a report entitled *Report on the Amortization of the Unfunded Pension Liability* filed in this proceeding.

RATE BASE

Reconciliation of Average Rate Base to Average Invested Capital

The reconciliation of average rate base to average invested capital for 2003 and for forecast 2004 and 2005 is set out in Table 6.

Table 6
Reconciliation of Average Invested Capital
To Average Rate Base

2004-2005 Forecasts (\$000's)

	2003 <u>Actual</u>	2004 <u>Forecast</u>	2005 <u>Forecast</u>
Average Invested Capital Average Rate Base (as per Schedule D)	669,779 <u>675,730</u>	706,291 <u>713,072</u>	736,119 <u>740,142</u>
Difference ¹	<u>(5,951)</u>	(6,781)	(4,023)
Reconciliation:			
Deferred Income Taxes Plant (primarily construction in progress) Corporate Income Tax Deposit Materials and Supplies (actual vs. allowance) Working Capital (actual vs. allowance) Common Equity (book vs. regulated)	494 1,678 6,949 879 (24,044) <u>8,093</u>	$1,206 \\ 1,186 \\ 6,949 \\ 800 \\ (25,992) \\ 9,070$	$1,316 \\ 1,657 \\ 6,949 \\ 1,165 \\ (25,215) \\ 10,105$
	(5,951)	(6,781)	(4,023)

¹ As per Order No. P.U. 19 (2003), the remaining reconciling items that constitute the difference between Rate Base and Invested Capital will be reviewed by the Company at its next general rate application.

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Report on the Amortization of the Unfunded Pension Liability



Introduction

In Order No. P.U. 35 (2003), the Board ordered Newfoundland Power (the "Company") to file a report addressing the amortization period in respect of the unfunded pension liability.

This report summarizes the components of the Company's pension funding for the 2004 and 2005 forecast periods based on the most recent actuarial valuation of the Plan by Mercer Human Resource Consulting ("Mercer"). The report also addresses Newfoundland Power's current approach to the amortization of pension funding.

Overview

In Order No. P.U. 19 (2003), the Board ordered Newfoundland Power (the "Company") to incorporate deferred charges in rate base commencing in 2003. Deferred pension costs are the cumulative differences between pension funding and pension expense over the life of the pension plan, and account for approximately 85% of Newfoundland Power's deferred charges.

Newfoundland Power funds its defined benefit pension plan (the "Plan") in accordance with Board approvals and actuarial determinations.

There are two components of pension funding. The first is current service cost. This is the actuary's determination of the present value of benefits to be paid related to service rendered by active employees during the current year.

The second component is past service pension funding, or special funding. This is funding to meet additional costs that are not related to the current service rendered by employees during the current year. These additional pension funding requirements can arise on plan initiation or amendments, early retirement programs, changes in assumptions or market returns on assets in the fund being greater or less than those expected. The actuary determines the payments that are necessary to eliminate this additional liability over a given period.

Pension legislation requires that pension funding be based on actuarial recommendations. Actuarial valuations must be conducted, at a minimum, once every three years. Newfoundland Power's special pension funding payments are in accordance with Board Orders and within the requirements of the *Pension Benefits Act*, 1997. Section 12 (3) of the *Pension Benefits Act Regulations* requires, in relation to a pension plan containing defined benefit provisions, that:

"... every employer shall pay to a pension fund

(c) special payments required to liquidate by equal payments made at least quarterly, with interest at the going concern valuation rate, any other going concern unfunded liability within 15 years of the review date of the actuarial valuation in which the liability is identified..."

Existing Rates

Newfoundland Power's current electricity rates were set following the Company's 2003 General Rate Application (GRA). The test year forecasts of pension funding presented to the Board during the 2003 GRA were based on Mercer's findings as presented in their actuarial valuation of the Plan as at December 31, 2000. An executive summary of that valuation was filed in the 2003 GRA as Undertaking U-12.

The December 31, 2000 valuation indicated that the unfunded liability in the Plan was \$27.9 million, and that special funding would be necessary, beginning in 2001, to liquidate the liability.

Incorporating Board-authorized funding, the Company provided for total special funding of \$7.6 million in 2003 and \$6.4 million in 2004, as shown in Table 1. The Company's test year revenue requirement, upon which current electricity rates are based, is premised on pension funding at the forecast levels.

Total Special	ble 1 Pension Funding 000s)	
	2003 Test Year	2004 Test Year
Special funding as authorized by Board	7,175	5,970
Special funding as determined by the actuary in accordance with actuarial guidelines	_414	<u>414</u>
Total Special Funding	7,589	6,384

Current Forecasts

Newfoundland Power is required to file its next valuation report with pension regulators by September 30, 2004. On August 18, 2004, at the request of Newfoundland Power, Mercer completed an actuarial valuation of the Plan as at December 31, 2003. Appendix A is a copy of Mercer's letter, dated August 18, 2004, summarizing the most recent actuarial valuation.

The results of the valuation indicate that there remained an unfunded liability, as at December 31, 2003, of \$24.1 million (as compared to \$27.9 million as at December 31, 2000).

To reflect the reduction in the present value of the unfunded liability as at December 31, 2003, the actuary derived a revised schedule of special funding payments that maintained the current

Board-approved schedule of funding in the immediate term and adjusted those payments that were in the most distant future. The present value of the revised schedule of special payments is equal to the going concern unfunded liability of \$24.1 million identified in the most recent valuation.

The current 2004 and 2005 forecasts of special funding are unchanged from the 2004 test year forecast. Table 2 sets out the total forecast of special pension funding for 2004 and 2005 based on the revised schedule of special payments.

Total Special	ble 2 Pension Funding 000s)	
	2004F	2005F
Special funding as authorized by Board	5,970	5,970
Special funding as determined by the actuary in accordance with		
actuarial guidelines	414	<u>414</u>
Total Special Funding	6,384	6,384

Amortization Period

Adequate funding of the Plan provides long term stability in the cost of pension liabilities to the Company's current and former employees. Adequate funding also allows the Plan and the Company as its sponsor to better weather variations in actual plan performance from that assumed when the funding levels are determined.

The Board has authorized the Company's current funding stream. The Company's approach has been to follow the approved funding stream until such time as the Plan is fully funded. Present estimates as set out in Appendix A indicate that this will be achieved in 2008, which is marginally faster than the amortization periods envisaged at the time the funding streams were authorized by the Board. Actual achievement of full funding can vary depending on such things as pension asset performance over time.

Current electricity rates were established with reference to special pension funding totalling 6,384,000 in the 2004 test year. Because income tax rules allow the deduction of pension funding (and not pension expense) in the determination of taxable income, the Company's income taxes are reduced by approximately 2.2 million in the test year ($6,384,000 \times 35\%$ income tax rate). This tax effect reduced the Company's 2004 revenue requirement and current

consumer rates by approximately \$3.4 million. Any reduction in funding levels would therefore have the effect of increasing revenue requirement and, consequently, electricity rates.

The unfunded liability of \$24.1 million at December 31, 2003 is required under pension legislation to be funded over a maximum period of 15 years. While earlier funding is acceptable from a pension regulatory perspective, the present value of any pension funding stream chosen to liquidate the unfunded liability must equal the \$24.1 million liability on an actuarial basis.

The Company has examined the overall impact of liquidating the unfunded pension plan liability over a longer period of time than that currently authorized by the Board. This would have the effect of increasing the Company's current revenue requirements and at least marginally jeopardizing the benefits in pension fund stability which full funding provides to the Company, its employees, and its customers.

Conclusion

Newfoundland Power's current schedule of pension funding incorporates the most recent actuarial determinations and is in compliance with pension legislation and Board orders. The tax effect of the current pension funding lowers the Company's revenue requirement, and the 2004 test year effect is a reduction of approximately \$3.4 million in the revenue required from rates.

The overall impact of liquidating the unfunded liability in the Plan over a longer period than the currently authorized funding pattern is an increase in the Company's current revenue requirements.

While pension plan funding for 2004 and 2005 is subject to change from the forecast provided above, it will be determined based on standards that have been consistently applied, and which are in compliance with actuarial principles and Board orders.

Appendix A

Letter from Mercer Human Resource Consulting Dated August 18, 2004

Human Resource Consulting

8CE Place 161 Bay Street, P.O. Box 501 Toronto, Ontario M5J 255 416 868 2000 Fax 416 868 7671 www.mercerHR.com

MHC Marsh & McLennan Companies

18 August 2004

Ms. Lisa Hutchens Newfoundland Power Inc. P.O. Box 8910 55 Kenmount Road St. John's, Newfoundland A1B 3P6

Private & Confidential

Subject: Final Valuation Results as at December 31, 2003

Dear Lisa:

As requested, we have completed final valuation results, as at December 31, 2003, for the Newfoundland Power Inc. Retirement Income Plan (the "Plan"). These results reflect the current Plan provisions.

Going Concern Basis

The results of the valuation as at December 31, 2003 in comparison with those of the previous valuation as at December 31, 2000 are summarized as follows:

	12.31.2003	12,31.2000
Actuarial value of assets	\$176,473,000	\$158,105,000
Actuarial liability		
Present value of accrued benefits for:		
active and disabled members	\$101,001,000	\$84,447,000
pensioners and survivors	99,158,000	100,683,000
 deferred pensioners 	433,000	894.000
Total liability	\$200,592,000	\$186,024,000
Funding excess/(unfunded liability)	\$(24,119,000)	\$(27,919,000)



Human Resource Consulting

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Ms. Lisa Hutchens

The valuation results as at December 31, 2003 are based on the same going concern assumptions are were used for the actuarial valuation of the Plan as at December 31, 2000 except for the following:

	12.31.2003	12.31.2000
Increases in Pensionable Earnings	4.0%	4.5%
Increases in the YMPE	4.0%	4.5%
Increases in the Maximum Pension	4.0% starting in 2006	4.0% starting in 2005
Permitted under the income Tax Act		

Solvency Basis

The Plan's solvency position as at December 31, 2003, in comparison with that of the previous valuation as at December 31, 2000, is determined as follows:

	12.31.2003	12.31.2000
Market value of assets	\$178,960,000	\$162,491,000
Termination expenses	(200,000)	(100,000)
Net market value of assets	\$178,760,000	\$162,391,000
Actuarial liability		
Present value of accrued benefits for:		
active and disabled members	\$59,578,000	\$38,952,000
pensioners and survivors	101,533,000	95,322,000
 deferred pensioners 	458,000	789.000
	\$161,569,000	\$135,063,000
Total liability	\$17,191,000	\$27,328,000

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The assumptions used in the solvency valuation as at December 31, 2003 are as follows:

Mortality rates:	GAM 1983
Interest rates for benefits to be settled through lump sum transfer:	6.00% per year
Interest rates for benefits to be settled through annuity purchase:	5.25% per year
Family composition:	Same as for going concern valuation
Termination expenses:	\$200,000

Funding Requirements

Current Service Cost

The estimated value of the benefits that will accrue on behalf of the active members during 2004, in comparison with the corresponding value determined in the previous valuation as at December 31, 2000, is summarized below:

	2004	2001
Total current service cost	\$4,642,000	\$4,186,000
Estimated member required contributions	(1,275,000)	(1,167,000)
Estimated company current service cost	\$3,367,000	\$3,019,000
Company current service cost expressed as a percentage of members' pensionable earnings	9.96%	9.65%

Special Payments

We understand that the current schedule of special payments, approved by the Board of Commissioners of Public Utilities, to amortize the going concern unfunded liability is as follows:

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Effective Date	Annua! Special Payment	End of Amortization Period	Present Value of Remaining Payments as a December 31, 2003
April 1, 1984	\$4,188,000	March 31, 2009	\$18,896,000
January 1, 1991	140.000	December 31, 2005	264,000
January 1, 1992	256,000	December 31, 2006	703,000
January 1, 1993	158,000	December 31, 2007	562,000
July 1, 1997	775,000	June 30, 2007	2,448,000
January 1, 1998	258,000	December 31, 2007	918,000
July 1, 1998	88,000	June 30, 2008	347,000
December 31, 1999	521,000	January 31, 2010	2,662,000
	\$6,384,000		\$26,800,000

The present value of these special payments (\$26,800,000) now exceeds the going concern unfunded liability of \$24,119,000 as at December 31, 2003. Therefore, we have adjusted the schedule of payments, reducing those payments in the most distant future, such that the present value of the revised schedule of special payments equals the going concern unfunded liability. The resulting schedule of special payments is as follows:

Effective Date	Annual Special Payment	End of Amortization Period	Present Value of Remaining Payments as a December 31, 2003
April 1, 1984	\$4,188,000	July 31, 2008	\$16,788,000
January 1, 1991	140,000	December 31, 2005	264,000
January 1, 1992	256,000	December 31, 2006	703,000
January 1, 1993	158.000	December 31, 2007	562,000
July 1, 1997	775,000	June 30, 2007	2,448,000
January 1, 1998	258,000	December 31, 2007	918,000
July 1, 1998	88,000	June 30, 2008	347,000
the second s	521,000	July 31, 2008	2,089,000
December 31, 1999	\$6,384,000		\$24,119,000

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This series of special payments meets the requirements of the Pension Benefits Act of Newfoundland and Labrador.

We trust that this provides you with the information you require. Should you have any questions or need anything further, please call.

Sincerely,

Pusti Scott Cushing

Tel: 416 868 2504 Fax: 416 868 0322 scott.cushing@mercer.com

Copy: Tony White, Newfoundland Power Inc. Lisa Hutchens, Newfoundland Power Inc. Anil Narale, Mercer Human Resource Consulting

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