IN THE MATTER OF the *Public Utilities Act,* (the "Act"); 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) (i) approving its 2001 Capital Budget; and (ii) approving leases for 2001 in excess of $5,000 per year; and
(b) (i) fixing and determining its average rate base for 1999 in the amount of $505,688,000; (ii) approving its revised forecast average rate base for 2000 in the amount of $518,724,000 ; and (iii) approving its forecast average rate base for 2001 in the amount of $526,065,000; 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 2001 pursuant to Orders No. P.U. 16 and 36 (1998-99) and No. P.U. 18 (1999-2000).

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 2001 Capital Budget 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 2001. 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 2001 capital expenditures, exclusive of general expenses capital, which comprise Newfoundland Power's 2001 Capital Budget.

4. Schedule C to this Application is a list of those leases proposed to be entered into by Newfoundland Power in 2001 where the cost of the lease is in excess of $5,000 in a year.

5. Schedule D 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 2001 Capital Budget but will not be completed in 2001.

6. Schedule E to this Application shows the variances between 2000 capital expenditures approved by Order P.U. 18 (1999-2000) and the projected actual capital expenditures of Newfoundland Power for 2000.

7. The proposed expenditures as set out in Schedules A through E of 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.

8. Schedule F to this Application shows Newfoundland Power's actual average rate base for 1999 of $505,688,000; revised forecast average rate base for 2000 of $518,724,000, and forecast average rate base for 2001 of $526,065,000.

9. Schedule G to this Application shows Newfoundland Power's revised forecast average invested capital for 2000 of $569,080,000 and forecast average invested capital for 2001 of $584,095,000.

10. Schedule H to this Application shows the calculation of the rate of return on rate base for Newfoundland Power using test year values approved by the Board by virtue of Order No. P.U. 36 (1998-99); the values approved by the Board by virtue of Order No. P.U. 18 (1999-2000); and the rate of return on rate base using the forecast average rate base and forecast average invested capital for 2001 as set out in paragraphs 8 and 9 of this Application.

11. As the Board determined in Order No. P.U. 18 (1999-2000), the use of current forecasts of average rate base and average invested capital for use in the Automatic Adjustment Formula is appropriate. The use of test year values for rate base and invested capital in establishing Newfoundland Power's allowed rate of return on rate base for 2001 by the Automatic Adjustment Formula is inappropriate as the Board will have approved additional capital expenditures of Newfoundland Power subsequent to Orders No. P.U. 16 (1998-99), No. P.U. 36 (1998-99) and No. P.U. 18 (1999-2000) by approving the 2001 Capital Budget. These approvals, in effect, increase Newfoundland Power's forecast average rate base and invested capital for 2001. It is not appropriate that the Board approve capital expenditures that result in changes to rate base and invested capital without approving the use of the revised forecasts of average rate base and average invested capital in calculating the allowed rate of return on rate base.

12. Communication with respect to this Application should be forwarded to the attention of Ian F. Kelly, Q. C. and Peter Alteen, Counsel to Newfoundland Power.

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

(a) pursuant to Section 41 of the Act:

(i) approving Newfoundland Power's purchase and construction in 2001 of the improvements and additions to its property as set out in this Application; and

(ii) approving Newfoundland Power's lease in 2001 of the improvements and additions to its property as set out in this Application.

(b) pursuant to Section 78 of the Act:

(i) fixing and determining Newfoundland Power's average rate base for 1999 in the amount of $505,688,000;

(ii) approving Newfoundland Power's revised forecast average rate base for 2000 in the amount of $518,724,000, and

(iii) approving Newfoundland Power's forecast average rate base for 2001 in the amount of $526,065,000.

(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 2001.

DATED at St. John's, Newfoundland, this 15th day of August, 2000.

NEWFOUNDLAND POWER INC.

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

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

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

IN THE MATTER OF an application by Newfoundland Power Inc. for an order pursuant to Sections 41, 78 and 80 of the Act:

(a) (i) approving its 2001 Capital Budget; and (ii) approving leases for 2001 in excess of $5,000 per year; and
(b) (i) fixing and determining its average rate base for 1999 in the amount of $505,688,000; (ii) approving its revised forecast average rate base for 2000 in the amount of $518,724,000 ; and (iii) approving its forecast average rate base for 2001 in the amount of $526,065,000; 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 2001 pursuant to Orders No. P.U. 16 and 36 (1998-99) and No. P.U. 18 (1999-2000).

AFFIDAVIT

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

1. That I am Vice-President, Engineering and Energy Supply 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
this 15th day of August, 2000,
before me:

Peter Alteen
Barrister

John G. Evans

Newfoundland Power Inc.
2001 Capital Budget
2001 Budget Summary
(000s)

Energy Supply	$	5,419
Substations		2,279
Transmission		2,169
Distribution		18,701
General Property		1,723
Transportation		1,866
Telecommunications		683
Information Systems		3,619
General Expenses Capital		2,650
Total	$	39,109

Newfoundland Power Inc.
2001 Capital Budget

ENERGY SUPPLY

	(000s)	Details on Page
HYDRO PLANTS – FACILITY REHABILITATION	$1,443	9
THERMAL PLANTS – FACILITY REHABILITATION	253	11
HYDRO PLANT – SURGE TANK REPLACEMENT	900	13
HYDRO PLANT – PENSTOCK REPLACEMENT	55	14
HYDRO PLANT – RUNNER UPGRADE	465	15
GREENHILL GAS TURBINE – REPLACE GOVERNOR & CONTROL LOGIC	511	17
SYSTEM CONTROL CENTRE – EXTEND SCADA CAPABILITIES	1,612	18
MAJOR ELECTRICAL EQUIPMENT REPAIRS	150	21
RELOCATE GAS TURBINE	30	22
TOTAL – ENERGY SUPPLY	**$5,419**	

Newfoundland Power Inc.
2001 Capital Budget

SUBSTATIONS

	(000s)	Details on Page
REBUILD SUBSTATIONS	$869	24
REPLACEMENT AND SPARE SUBSTATION EQUIPMENT	134	25
RELIABILITY AND POWER QUALITY IMPROVEMENTS	120	26
SUBSTATION PROTECTION AND MONITORING IMPROVEMENTS	347	27
ST. JOHN'S AREA TRANSMISSION RELAYING IMPROVEMENT PROGRAM	553	28
ADDITIONS DUE TO LOAD GROWTH	256	30
TOTAL – SUBSTATIONS	$2,279	

Newfoundland Power Inc.
2001 Capital Budget

TRANSMISSION

	(000s)	Details on Page
REBUILD TRANSMISSION LINES	$2,094	31
RELOCATION OF TRANSMISSION LINES FOR THIRD PARTIES	75	33
TOTAL - TRANSMISSION	**$2,169**	

Newfoundland Power Inc.
2001 Capital Budget

DISTRIBUTION

	(000s)	Details on Page
EXTENSIONS	$3,305	34
METERS	816	35
SERVICES	1,423	36
STREET LIGHTING	913	37
TRANSFORMERS	4,678	39
RECONSTRUCTION	1,720	41
TRUNK FEEDERS		
Rebuild Distribution Lines	2,944	42
Relocate/Replace Distribution Lines For Third Parties	301	44
Distribution Reliability Initiative	1,856	46
Improve Distribution System Protection/Operation	360	48
Replace Underground Switches - Water Street, St. John's	285	49
INTEREST DURING CONSTRUCTION	100	50
TOTAL - DISTRIBUTION	**$18,701**	

Newfoundland Power Inc.
2001 Capital Budget

GENERAL PROPERTY

	(000s)	Details on Page
TOOLS AND EQUIPMENT	$403	51
ADDITIONS TO REAL PROPERTY	570	53
ALLOWANCE FOR UNFORESEEN ITEMS	750	55
TOTAL – GENERAL PROPERTY	$1,723	

Newfoundland Power Inc.
2001 Capital Budget

TRANSPORTATION

	(000s)	Details on Page
PURCHASE OF VEHICLES AND AERIAL DEVICES	$1,866	56
TOTAL – TRANSPORTATION	**$1,866**	

Newfoundland Power Inc.
2001 Capital Budget

TELECOMMUNICATIONS

	(000s)	Details on Page
FIBRE OPTIC NETWORKING	$384	57
SUBSTATION TELEPHONE CIRCUIT PROTECTION	154	58
REPLACE/UPGRADE COMMUNICATIONS EQUIPMENT	145	59
TOTAL – TELECOMMUNICATIONS	**$683**	

Newfoundland Power Inc.
2001 Capital Budget

INFORMATION SYSTEMS

	(000s)	Details on Page
APPLICATION ENHANCEMENTS	$657	61
APPLICATION ENVIRONMENT	480	63
BUSINESS SUPPORT SYSTEMS	1,163	65
PERSONAL COMPUTER INFRASTRUCTURE	473	66
INFRASTRUCTURE ENVIRONMENT	162	68
SHARED SERVERS INFRASTRUCTURE	575	69
INTERNET	109	70
TOTAL – INFORMATION SYSTEMS	**$3,619**	

ENERGY SUPPLY

HYDRO PLANTS
FACILITY REHABILITATION

Project Cost

$1,443,000

Nature of Project

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

The project involves:

a) Replacement/rehabilitation work at 16 of the Company's 23 hydroelectric plants. The work includes the replacement or rehabilitation of various spillways, rip rap on a number of dams, a forebay canal, stop log structures, utility sheds, cooling coils and a generator breaker. The estimated cost for this work is $897,000.

b) Work related to plant efficiency, reliability or the environment includes the addition of water management, upgrade of plant metering and upgrade of sanitary holding tanks at various hydroelectric plants. The estimated cost for this work is $546,000.

The following table lists the projects for 2001:

Project	Cost (000s)
Fisheries Compensation Valve	$197
Public Safety Items	170
Cooling Coil Controls and Replacement	90
Generator Breaker Replacement	81
Generation Meter Replacement	80
Rebuild Forebay Canal	78
Runner Refurbishment	55
Various Projects < $50,000	692
Total	**$1,443**

HYDRO PLANTS
FACILITY REHABILITATION (Cont'd)

Customer Impact

These facilities provide energy to the Island Interconnected Electrical System and maintaining these generating facilities and infrastructure reduces the need for developing additional, more expensive generation capacity.

Project Justification

Projects such as these ensure the continued operation of Newfoundland Power's existing 23 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 431 GWh. Replacing only the energy produced by these facilities by increasing production at the Holyrood generation facility would require approximately 712,000 barrels of fuel annually. At current oil prices, this would translate into approximately $20 million in annual savings. Maintaining these generating facilities also contributes to system stability and in many cases provides a source for local power backup.

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

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

Future Commitments

None.

THERMAL PLANTS
FACILITY REHABILITATION

Project Cost

$253,000

Nature of Project

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

The 2001 project involves:

a) Replacement/rehabilitation of a diesel unit enclosure and refurbishment of a radiator.

b) Control improvements.

c) Replacement of air intake enclosure.

The following table lists the larger projects for 2001:

Project	Cost (000s)
Air Intake Enclosure Replacement	$88
Enclosure Refurbishment and Replacement	67
Control Improvements	62

Customer Impact

These facilities benefit customers by ensuring the availability of backup power sources during system problems.

THERMAL PLANTS
FACILITY REHABILITATION (Cont'd)

Project Justification

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

An alternative to maintaining these facilities would be to retire them. These facilities currently provide approximately 50 MW of backup generation capacity. Replacement of this capacity would cost in excess of $1,000,000 per MW utilizing existing sites. Therefore the replacement cost of these facilities would be approximately $50,000,000.

The economic viability of these plants is reviewed on an ongoing basis and facilities are retired if they are no longer economic. For example, over the last few years we have retired several small diesel plants as well as the 30 MW St. John's Steam Plant.

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.

HYDRO PLANT
SURGE TANK REPLACEMENT

Project Cost

$900,000

Nature of Project

This project is necessary for the replacement of the surge tank at the Cape Broyle Hydro Plant facility. An inspection was performed on the 1950s vintage surge tank in 1998 as part of a review of the condition of all surge tanks. The report, which was completed by Varcon Inc., recommended replacement of the structure due to deterioration.

Customer Impact

This project will ensure the continued safe operation of the hydro plant. If the project is not undertaken the risk to property, employee safety, and the environment is greater due to the possibility of failure. Tank failure would cause a shutdown of the facility, with the energy being replaced by more expensive thermal generation.

Project Justification

This project is being carried out to ensure the safe operation of this hydro development and has been recommended by an independent engineering consultant. Failure to do this work may require shutting down this plant.

This facility has an annual production of approximately 34 GWh. Replacing only the energy produced by this facility by increasing production at the Holyrood generation facility would require approximately 56,000 barrels of fuel annually. At current oil prices, this would translate into a fuel cost of approximately $1.7 million annually.

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.

HYDRO PLANT
PENSTOCK REPLACEMENT

Project Cost

$55,000

Nature of Project

This project is necessary for the replacement of a deteriorated 42 ft. wooden penstock at the Fall Pond Hydro Plant forebay dam.

Customer Impact

This project will ensure the lowest possible power rate to customers by maintaining existing hydro generation, thus reducing the requirement for more expensive purchased power.

Project Justification

The existing woodstave penstock has deteriorated and must be replaced to ensure the continued safe operation of the plant.

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.

HYDRO PLANT
RUNNER UPGRADE

Project Cost

$465,000

Nature of Project

This project is necessary for the replacement of the deteriorated turbine runner and wicket gates, and for associated transformer upgrading at the Sandy Brook Hydro Plant facility.

The engineering design work and procurement of the turbine runner and associated components will be completed in 2000 at a cost of $300,000. Installation of the equipment will be completed in 2001.

Customer Impact

This project will ensure the lowest possible power rate to customers by maintaining existing hydro generation and avoiding the cost of more expensive thermal generation.

Project Justification

The existing turbine runner and wicket gates, which were installed in 1963, are deteriorated. The turbine efficiency has been measured at 78%.

The alternative to maintaining this plant would be to retire it. This facility has an average annual production of approximately 27 GWh. Replacing only the energy produced by this facility by increasing production at the Holyrood generation facility would require approximately 44,500 barrels of fuel annually. At current oil prices, this would translate into a fuel cost of nearly $1.3 million annually. This is the energy replacement savings only and does not consider other items such as the capacity, system stability, and reliability that this facility adds to the system.

The replacement of the turbine runner and wicket gates with a modern design will increase turbine efficiency to 87% and will increase the plant capacity by approximately 35%. This will enable the plant to produce approximately an additional 3.3 GWh per year, which would displace an additional 5,400 barrels of fuel at the Holyrood generation facility ($160,000 savings annually).

HYDRO PLANT
RUNNER UPGRADE (Cont'd)

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

Future Commitment

None.

GREENHILL GAS TURBINE
REPLACE GOVERNOR & CONTROL LOGIC

Project Cost

$511,000

Nature of Project

This project is necessary to replace deteriorated equipment and involves replacing the governor on the Greenhill Gas Turbine. This project, which was originally presented in the 2000 Capital Budget, was deferred to 2001. The deferral resulted from a detailed engineering review which revealed the project scope was larger than anticipated.

Customer Impact

This generator is normally utilized during emergency situations. Failure of the governor could lead to the unavailability of this unit for such emergencies.

Project Justification

The governor is deteriorated and obsolete. There is minimal support available from the manufacturer and spare parts are not readily available. If the governor is not replaced, the viability of the plant's operational status is threatened.

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

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.

SYSTEM CONTROL CENTRE
EXTEND SCADA CAPABILITIES

Project Cost

$1,612,000

Nature of Project

This project is necessary to extend and leverage the capabilities of the new SCADA system using its advanced applications to improve efficiency and customer service throughout Company operations.

The Company operates over 100 substations delivering power to over 200,000 customers via 300 feeders and 8,000 kilometres of distribution lines. Historically, the monitoring and operation of this system has required the deployment of technical and operations staff to remote locations in order to manually operate switches and other equipment and to visually locate problems on transmission and distribution lines. The new SCADA system has the capability to significantly reduce, in many circumstances, the need to have personnel on site to carry out these functions.

Remote monitoring and operation of substation equipment, including individual feeder circuits, is currently provided in 40% of substations. The ability to remotely control substation equipment and monitor operations can reduce the extent and duration of power outages by either providing advance warning of problems before they cause outages or, when outages occur, by enabling system control personnel to assist repair crews to quickly locate problems on the lines and to restore power in a timely fashion. Remote monitoring also provides information that enables system control personnel to operate the system more efficiently and to deliver higher quality power.

Where remote monitoring does not exist, the Company must rely on customers to call and advise the Company that main line power outages have occurred. Remote monitoring of substations and feeder circuits provides control centre personnel with immediate indication that an outage has occurred, thereby reducing trouble response time.

In addition, the ability to immediately de-energize lines can greatly reduce the public safety hazard created by downed lines. The planned enhancements will also enable monitoring of substation yard security and environmental conditions.

This project includes an expenditure of $847,000 to raise the percentage of substations with remote monitoring and operation capability, including remote feeder control, to over 90%. Individual feeder control will be implemented in nearly 50% of substations.

SYSTEM CONTROL CENTRE
EXTEND SCADA CAPABILITIES (Cont'd)

In addition to remote control and monitoring of substations, the new SCADA system has enabled the Company to implement distribution automation technology on the electrical system. Using new intelligent electronic device (IED) technology, the Company is now able to move control and monitoring further down the feeder, and closer to the customer. This will reduce the numbers of customers exposed to individual outages by enabling the Company to locate faults on the system with far greater precision than is now possible, and to restore power almost instantly to unaffected portions of the feeder. Greater precision in locating faults also limits the area to be searched by the repair crew, in many cases reducing the time needed to repair the fault and restore the feeder to normal operation.

This project includes an expenditure of $376,000 for distribution automation projects on feeders controlled from the Kenmount Road substation in St. John's, and one feeder in the Avalon operating region. This is the initial phase of a prioritized deployment of distribution automation technology throughout the Company's electrical system.

The Kenmount Road feeders, which serve the Cowan Heights area of St. John's and adjacent areas of Mount Pearl, are major feeders serving a large urban residential load. Restoring service on such feeders can be difficult because picking up a large load at once can jeopardize system stability. This so-called "cold load pickup" problem can be significantly reduced if the outage can be limited to a small portion of the feeder.

In Avalon region, distribution automation technology will be installed on the feeder serving the Cape Shore. This feeder, at approximately 90 kilometres in length, is one of the longest and most exposed of the Company's feeders. For most of its length, it is exposed to the harsh marine environment of Placentia Bay. The ability to locate problems with more precision and to remotely restore service to unaffected portions of the feeder will significantly improve the Company's response to problems on the feeder.

Other significant expenditures include the installation of a disaster recovery facility for the new SCADA system ($145,000) and the replacement of an obsolete SCADA system remote monitoring system so regional operations personnel can monitor system operations ($143,000).

Customer Impact

Enhancing SCADA system operations provides the functionality to minimize the impact of power outages on customers. Outages will affect smaller groups of customers and power will be restored much more quickly. Monitoring power quality and voltage levels allows system operators to take corrective action before power quality problems occur. Remote control reduces the hazards to the public associated with downed conductors.

SYSTEM CONTROL CENTRE
EXTEND SCADA CAPABILITIES (Cont'd)

Project Justification

The project is justified on the basis of improvements in power system reliability, more efficient operation of the electrical system, improvements in employee and public safety, and improvements in power quality and information provided to customers.

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

Future Commitments

None.

MAJOR ELECTRICAL EQUIPMENT REPAIRS

Project Cost

$150,000

Nature of Project

This project is necessary to provide for the unanticipated cost of major equipment replacement or rehabilitation occasioned by deterioration or catastrophic failure. Major equipment includes transformers, generators and turbines. The project cost is based on an assessment of historical expenditures. For comparison purposes, a similar amount for this item was included in the 2000 Capital Budget.

Customer Impact

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

Project Justification

Past experience indicates that unforeseen equipment failures will occur. Projects covered by this budget item in the past include generator rewinding, power transformer rehabilitation and power production equipment replacements due to failures.

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.

RELOCATE GAS TURBINE

Project Cost

$30,000

Nature of Project

This project is necessary to complete the engineering and design work required for the relocation of a gas turbine from the Salt Pond substation to a location where the unit can be more effectively utilized as a back-up generator. The relocation of the gas turbine is planned for 2002.

The engineering and design work will provide for enlarging the substation to which it will be relocated to accommodate the power transformer and breaker associated with the gas turbine plant. Also, the power line protection will require upgrading to accommodate the addition of the generator.

Customer Impact

This project will provide increased electrical system reliability to customers at the new location by providing a back-up source of energy during outages on the radial transmission line serving them. The project will not materially affect the reliability of service to customers in the Burin area.

Project Justification

A number of areas in the Company's service territory are currently served by radial transmission lines. The Company is exploring various options with regard to improving the reliability of service to areas served by long radial lines. These options include constructing a second transmission line to serve an area, installing a new source of generation, and relocating an existing generator. Of the three alternatives, the least cost option would generally be the relocation of an existing generator.

The Company presently has a gas turbine generator located at Salt Pond on the Burin Peninsula. This gas turbine has provided an alternate energy supply to customers in the Burin area that were originally served by one Newfoundland and Labrador Hydro (Hydro) radial transmission line. Since the installation of the Salt Pond gas turbine, Hydro has constructed a second transmission line on the Burin Peninsula. This has improved reliability of service and greatly reduced the requirement for emergency generation in the Burin area. The gas turbine at Salt Pond has only been used three times in the past five years to provide emergency generation for the Burin area.

RELOCATE GAS TURBINE (Cont'd)

As a result, the Company believes that the Salt Pond gas turbine will be more effectively utilized by relocating it to provide backup generation to an area that still relies on a single source of supply.

When the generator is relocated, it will also reduce maintenance costs and improve worker safety in its new location by allowing the transmission line serving the area to be de-energized prior to work being carried out.

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

It is currently estimated that relocation of the gas turbine could cost up to $2.0 million in 2002. A more accurate estimate cannot be made until the new location of the unit is determined, and the engineering and design work is completed.

SUBSTATIONS

REBUILD SUBSTATIONS

Project Cost

$869,000

Nature of Project

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

Some of the larger of these projects included in the 2001 expenditures are: replacement of 66 kV and 25 kV structures at Blaketown substation ($484,000), rebuilding the Garnish substation ($86,000), and the upgrading of structures at Lewisporte substation ($133,000).

Customer Impact

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

Project Justification

The project is justified by the need to replace deteriorated equipment. The majority of these supporting structures are forty to fifty years old and many of the components are deteriorated. These expenditures will ensure reliable service and address potential safety concerns.

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

Future Commitments

None.

REPLACEMENT AND SPARE SUBSTATION EQUIPMENT

Project Cost

$134,000

Nature of Project

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

This project involves the purchase and installation of battery banks and chargers to replace deteriorated equipment, engineering work associated with the impending replacement of deteriorating power transformers at Horsechops and Rattling Brook, and the purchase of a spare voltage regulator for emergency use.

The need to replace equipment is determined on the basis of tests, inspections and the operational history of the equipment. The maintenance 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.

Customer Impact

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

Project Justification

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

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

Future Commitments

None.

RELIABILITY AND POWER QUALITY IMPROVEMENTS

Project Cost

$120,000

Nature of Project

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

Voltage regulation equipment will be installed in Gillam's and Frenchman's Cove substations to ensure appropriate distribution voltages are maintained for customers in the Bay of Islands area.

This project also involves modifications at Princeton Pond switching yard. This switching yard was constructed in 1999 at the intersection of a 66 kV transmission line and a 138 kV transmission line so that power could be supplied to the Bonavista Peninsula from either line. The modifications will allow the installation of a portable substation that will ensure appropriate voltage levels are maintained when maintenance work is being conducted on those transmission lines.

Customer Impact

This project will ensure customers are supplied appropriate voltage levels.

Project Justification

The installation of voltage regulating equipment is the least cost approach to maintaining voltage levels within acceptable ranges. The Company follows guidelines established by CSA standards for maintaining voltage levels. The use of voltage regulating equipment is standard practice in the industry.

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

Future Commitments

None.

SUBSTATION PROTECTION AND MONITORING IMPROVEMENTS

Project Cost

$347,000

Nature of Project

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

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

This project will make improvements to the protection and monitoring systems to allow for the safe and reliable operation of substations. It includes such items as the installation of digital recording voltmeters, reclosers on transmission lines and fuses on power transformers; the replacement of deteriorated metering enclosures; and the addition of voltage measuring devices (potential transformers) to improve energy and demand metering at substations.

The project is based on detailed estimates for individual projects at specific substations.

Customer Impact

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

Project Justification

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

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

Future Commitments

None.

ST. JOHN'S AREA TRANSMISSION RELAYING IMPROVEMENT PROGRAM

Project Cost

$553,000

Nature of Project

This project is necessary to help maintain the reliability and security of the electrical system.

This project is the continuation of an ongoing initiative to establish and/or upgrade pilot wire relaying, as well as breaker failure protection schemes, on identified 66kv transmission lines and buses. This initiative commenced in 1999 with a planned three-year program for the improvement of transmission relaying in the St. John's operating area. This project will complete the primary protection portion of the program. The backup protection portion of the program has been deferred pending a detailed assessment of new technology.

Customer Impact

This project provides for the safe clearing of faults on the electrical system and maintains operation of the system to avoid unnecessary power interruptions to customers.

Project Justification

The existing protection schemes on the identified transmission lines cannot ensure adequate clearing times to prevent all faults on the system from causing stability problems at major generation facilities such as Holyrood, Bay D'Espoir and Cat Arm. The resulting system-wide disturbances can cause unnecessary customer outages or damage to customer or utility equipment.

Newfoundland Power and Newfoundland Hydro have jointly developed recommendations to reduce or eliminate the system-wide disturbances related to such problems on the transmission grid. As a result, implementation began in 1999 on a new protection scheme consisting of pilot wire relaying using fiber optic communication cables. This scheme will ensure that multi-phase faults on the 66kV lines are cleared by primary protection within 10 cycles (1/6 second), or by backup protection within 30 cycles (1/2 second), thereby reducing the likelihood of any significant impact on the provincial electrical system.

This project will help maintain the reliability and security 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.

ST. JOHN'S AREA TRANSMISSION RELAYING IMPROVEMENT PROGRAM (Cont'd)

Future Commitments

The work undertaken this year will provide immediate benefits to the electrical system and is not dependent on future work. However, completion of the breaker failure protection portion of the program has been deferred pending a detailed assessment of new technology, which appears to offer more effective protection than the technology originally envisioned for the program. Implementation of this technology would take place in 2002 and 2003. An estimate of the cost of completing this aspect of the program cannot be made until the assessment of the technology's capabilities has been completed.

ADDITIONS DUE TO LOAD GROWTH

Project Cost

$256,000

Nature of Project

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

In 2001, a new feeder will be installed at Hardwoods substation to accommodate growth in the Paradise area. Design work will also be conducted in 2001 for increased loads at other substations such as Chamberlains (Conception Bay South) and Walbournes (Corner Brook).

Customer Impact

This project is required to provide additional substation capacity to serve customer load growth.

Project Justification

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

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

Future Commitments

None.

TRANSMISSION

REBUILD TRANSMISSION LINES

Project Cost

$2,094,000

Nature of Project

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

This project category includes numerous projects aimed at rebuilding and replacing deteriorated transmission structures and conductors. The project cost is based on a combination of historical costs and individual project estimates. The 2001 budget will address deficiencies on approximately 35 transmission lines.

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

The following table lists the larger projects for 2001:

Project	Cost (000s)
403L St. Georges to Lookout Brook	$400
301L Salt Pond to Grand Bank	263
124L Clarenville to Gambo	126
410L Port Au Port Peninsula	120
24L Goulds to Mobile	90

For comparison purposes, the equivalent expenditures for this category were approximately $1,652,000 for 1999 and $813,000 for 2000.

Customer Impact

This project maintains the structural integrity of transmission lines and addresses upgrades identified during inspections. This is critical for the reliable performance of the transmission system and to ensure its safe operation.

REBUILD TRANSMISSION LINES (Cont'd)

Project Justification

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

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

Future Commitments

None.

RELOCATION OF TRANSMISSION LINES FOR THIRD PARTIES

Project Cost

$75,000

Nature of Project

This project is necessary to accommodate requests from third parties for the relocation of transmission lines.

For 2001, relocations are required on two transmission lines; one in Conception Bay North and the other in St. John's. These relocations are being done at the request of the Department of Works, Services and Transportation in order to facilitate new road construction.

The project cost is based on individual project estimates. For comparison purposes, the equivalent expenditures for this category were $263,000 for 1999 and $385,500 for 2000.

Customer Impact

There is no direct customer impact related to this project.

Project Justification

This project responds to specific requests from third parties to relocate sections of transmission lines.

A portion of the cost to relocate lines for the government will be recovered. All government contributions associated with this project have been included in the $1.5 million contribution in aid of construction amount referred to in the Application.

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

Future Commitments

None.

DISTRIBUTION

EXTENSIONS

Project Cost

$3,305,000

Nature of Project

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

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

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

Customer Impact

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

Project Justification

This project is justified on the basis of customer requirements.

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

Future Commitments

None.

METERS

Project Cost

$816,000

Nature of Project

This project is necessary to accommodate customer growth and to replace deteriorated electrical equipment. The project cost includes purchasing meters for new customers as well as replacement meters for existing customers. The quantity of meters for new customers is based on the customer forecast. The quantity of meters for replacement purposes is determined using historical data for damaged meters and sampling results from previous years. Sampling is done in accordance with regulations under the *Electricity and Gas Inspection Act*.

Effective April 1, 2000, Measurement Canada, an Industry Canada agency that regulates the use of electricity meters, discontinued testing and sealing of energy-only meters for electric utilities. Further, effective April 1, 2001, Measurement Canada will no longer test and seal demand meters for electric utilities. Electric utilities must either become accredited by Measurement Canada to perform such tasks, or must contract out these tasks to an accredited organization. Newfoundland Power has decided it is cost effective to contract out such activities.

Customer Impact

This project provides for metering installations in response to customer requests for new service connections. Through a rigorous meter testing and replacement program customers are provided with accurate metering of their electricity consumption.

Project Justification

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

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

Future Commitments

None.

SERVICES

Project Cost

$1,423,000

Nature of Project

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

Expenditures on this project are driven by both customer growth and the Company's experience with regard to service wires that must be replaced to maintain reliable service and power quality. The projected expenditures for Services for 2001 are $1,064,000 for new services and $359,000 for replacement services.

With the exception of some small individually estimated projects, the project cost is calculated on the basis of historical data. For new services, historical annual expenditures are adjusted for inflation and divided by the forecast 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.

Customer Impact

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

Project Justification

These projects are justified on the basis of customer requirements.

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

Future Commitments

None.

STREET LIGHTING

Project Cost

$913,000

Nature of Project

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

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 total number of customers forecast to determine the budget estimate.

The projected expenditures for Street Lighting for 2001 are $607,000 for new street light services and $306,000 for replacement street light services.

Customer Impact

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

STREET LIGHTING (Cont'd)

Project Justification

These projects are justified on the basis of customer requirements.

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

Future Commitments

None.

TRANSFORMERS

Project Cost

$4,678,000

Nature of Project

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

Transformer requirements can be divided into three categories as follows:

a) Transformers for new customers are based on an historical ratio of transformers per new customer for each of the Company's operating areas. This ratio is multiplied by the forecast number of new customers.

b) Replacement transformers are based on field surveys of rusty or deteriorated transformers. The final number of purchased replacement transformers included in the budget is reduced to reflect the number of transformers that can be refurbished by the Company in its electrical repair facilities.

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.

Total transformer requirements are met by new purchases and refurbishment of units removed from service. The Company expects to refurbish 975 units and purchase 2,121 new units in 2001 for a total of 3,096 units. Of this total, 1,523 units are projected for customer growth, 1,172 units to replace deteriorated transformers, and 401 units for upgrades and burnouts, etc.

Customer Impact

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

Project Justification

This project is required to provide and maintain service to customers. Transformers are purchased through a competitive tendering process. The company is currently in the process of tendering new transformer purchases.

TRANSFORMERS (Cont'd)

The Company continues to experience significant corrosion problems with transformer tanks. This presents both potential service reliability and environmental issues for the Company. In response, field surveys to identify rusty units have been escalated. The number of units identified as needing replacement has increased as a result.

Galvanized tanks have been predominantly purchased since 1999 and the Company plans to purchase either galvanized or stainless steel tanks in 2001 to address this problem on a go forward basis. These initiatives have placed upward pressure on overall transformer expenditures as the galvanized and stainless steel tanks are approximately 13% and 18% respectively more expensive than the electrostatic tanks purchased previously. The Company expects this trend to continue for the next few years.

The projected increase in expenditures for Transformers in 2001 compared to 2000 stems from an increase in the expected number of transformers to be replaced due to deterioration.

Future Commitments

None.

RECONSTRUCTION

Project Cost

$1,720,000

Nature of Project

This project is necessary to provide for the replacement of deteriorated or storm damaged distribution structures and electrical equipment. This project is generally comprised of a number of smaller projects that are identified during line inspections or recognized following operational problems. By their nature these are high priority projects that normally cannot be deferred to the next budget year. This project differs from the Rebuild Distribution Lines project described at page 42 of 70, which involves rebuilding entire sections of trunk lines that are identified and planned in advance of budget preparation.

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

Customer Impact

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

Project Justification

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

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

Future Commitments

None.

TRUNK FEEDERS
REBUILD DISTRIBUTION LINES

Project Cost

$2,944,000

Nature of Project

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

This project is distinguished from the Reconstruction project described at page 41 of 70 in that these projects are larger, previously defined and estimated in advance of the budget process. Plans for these projects are developed from line inspection reports that assess the age, condition, maintenance costs, and overall integrity of the distribution line to provide for public and employee safety. Unlike the Distribution Reliability Initiative projects described at page 46 of 70, the selection of lines for rebuilding focuses more on this actual physical condition than on their historical reliability performance.

Distribution rebuild projects can involve either the complete rebuilding of deteriorated distribution lines or the selective replacement of various line components. These typically include pole replacement, crossarm replacement, conductor replacement including replacement of underground distribution equipment, and insulator replacement. In rural areas the need to replace deteriorated lines built under the Rural Electrification Act (REA) in the early 1960s is increasing. As well, 40 and 50 year old lines in the central areas of the City of St. John's will require replacement over the next five to seven years.

Some 32 individual projects are planned for completion under this category for 2001. The largest of these is $1,270,000 to rebuild complete feeders in the older sections of St. John's which provide service from Kings Bridge, Stamps Lane and St. John's Main substations.

Examples of other significant projects include $150,000 to rebuild the line from Dunville to Fox Harbour/Ship Harbour, $148,000 to replace the line from Swift Current to North Harbour, $64,000 to rebuild a line to Musgrave Harbour, $56,000 to replace underground cables in the City of Corner Brook, $50,000 to replace REA lines in Burin, and $50,000 to replace underground secondary conductors in the Town of Stephenville.

TRUNK FEEDERS
REBUILD DISTRIBUTION LINES (Cont'd)

Customer Impact

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

Project Justification

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

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

Future Commitments

None.

TRUNK FEEDERS
RELOCATE/REPLACE DISTRIBUTION LINES FOR THIRD PARTIES

Project Cost

$301,000

Nature of Project

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

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

Work initiated by government is estimated to be $90,000 in 2001 and is normally associated with road widening and road realignment. NewTel Communications work, estimated at $61,000 in 2001, is driven by their need to relocate or replace lines for additional cable installations and is governed under the terms of the Joint Use Agreement between Newfoundland Power and NewTel Communications. Customer requests typically involve relocation of poles, anchors and guy wires from private property and is estimated to be $100,000 in 2001. The estimated cost for vehicle accident damage in 2001 is $50,000. The decrease in this budget category compared to the 2000 forecast ($596,000) is a reflection of a forecast reduction in work initiated by the Department of Works Services and Transportation of the provincial government.

Customer Impact

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

Project Justification

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

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

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

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

Future Commitments

None.

TRUNK FEEDERS
DISTRIBUTION RELIABILITY INITIATIVE

Project Cost

$1,856,000

Nature of Project

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

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

Customer Impact

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

Project Justification

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

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

TRUNK FEEDERS
DISTRIBUTION RELIABILITY INITIATIVE (Cont'd)

The following table identifies the feeder projects over $50,000 selected for 2001 and indicates the estimated project cost, the number of customers affected, and the average yearly interruption statistics for the five-year period ending June 30, 2000. The SAIFI and SAIDI statistics exclude planned power interruptions and interruptions due to loss of supply from Hydro.

Feeder	Cost (000s)	Number of Customers	SAIFI[1] Interruptions Per Year	SAIDI[2] Hours Per Year
Holyrood (HOL-01)	$400	1,752	1.6	9.0
Trepassey (TRP-01)	150	680	2.8	3.7
Old Perlican (OPL-02)	400	835	2.8	8.1
Bay L'Argent (BLA-01)	102	1,258	4.6	12.4
Robinson's (ROB-01)	376	1,173	7.6	12.5
Doyle's (DOY-01)	225	1,115	2.4	4.4
Indian Cove (IND-01)	113	351	2.3	7.3
Company Average			**1.7**	**3.0**

Notes:

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

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

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

Future Commitments

None.

TRUNK FEEDERS
IMPROVE DISTRIBUTION SYSTEM PROTECTION/OPERATION

Project Cost

$360,000

Nature of Project

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

For 2001, this category includes $125,000 for lightning arresters in Burin, Grand Falls and Stephenville areas, $135,000 for the installation of fuses or cutouts in St. John's Region and Western Region, and $100,000 for switches in St. John's Region that will improve the Company's ability to transfer customers from one distribution feeder to another.

Customer Impact

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

Project Justification

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

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

Future Commitments

None.

TRUNK FEEDERS
REPLACE UNDERGROUND SWITCHES - WATER STREET, ST. JOHN'S

Project Cost

$285,000

Nature of Project

This project is necessary to replace three high voltage oil-filled switches located in the Water Street underground distribution system.

Alternatives being explored with regard to the replacement of the existing oil switches include relocating some of the switches above ground or to building vaults upon replacement, or configuring the replacement switches for remote operation.

Customer Impact

This project will improve the reliability of service to the approximately 425 customers in the Water Street area.

Project Justification

The high voltage switches are 30 years old and approaching the end of their useful life. The manufacturer no longer supplies replacement parts for this type of switch.

There are safety issues associated with certain operations of the existing switch. The switch relies on manual operation and internal arcing and deterioration of contacts may occur. New switches have technology that eliminates these safety concerns. Until such time as the switches are replaced, large segments of the feeder must be de-energized prior to performing any switching operations.

Future Commitments

None. However, there will be six switches of this type remaining in service following completion of this project. The Company plans to replace or remove all switches and is currently finalizing the engineering and acquiring the necessary property rights.

INTEREST DURING CONSTRUCTION

Project Cost

$100,000

Nature of Project

This is an estimate of the interest during construction that will be charged on distribution work orders with an estimated expenditure of less than $50,000 and a construction period in excess of three months. This calculation is based on an estimated monthly average of total distribution work in progress of $1 million. The interest rate which is applied each month is dependent on the source of funds to finance the capital expenditure and is calculated in accordance with Order No. P.U. 37 (1981).

Customer Impact

No direct customer impact.

Project Justification

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

Future Commitments

None.

GENERAL PROPERTY

TOOLS AND EQUIPMENT

Project Cost

$403,000

Nature of Project

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

The following table lists the project costs for 2001:

Category	Cost (000s)
Line Tools and Equipment[1]	$286
Office Furniture and Equipment[2]	117
Total	**$403**

Notes:

[1] Line Tools and Equipment includes various tools and equipment used by line staff, electrical maintenance staff, and engineering and field technical staff. The tools and equipment include hydraulic tools, instruments, test gear, and inspection equipment.

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

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

For comparison purposes, the equivalent expenditures for this category in the 2000 Capital forecast were $532,400.

Customer Impact

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

TOOLS AND EQUIPMENT (Cont'd)

Project Justification

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

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

Future Commitments

None.

ADDITIONS TO REAL PROPERTY

Project Cost

$570,000

Nature of Project

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

The following table lists the project costs for 2001:

Category	Cost (000s)
Additions[1]	$100
Renovations[2]	470
Total	**$570**

Notes

[1] Additions includes a service building modification for the Burin/Salt Pond operation.

[2] Renovations includes replacement of the roof at the Kenmount Road building, improvements to the HVAC system at Duffy Place, security and fire protection improvements at various buildings, and other service building improvements.

The project cost is based on a combination of historical costs and individual project estimates. For comparison purposes, the equivalent expenditure for this category in the 2000 Capital forecast is $411,300.

Customer Impact

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

ADDITIONS TO REAL PROPERTY (Cont'd)

Project Justification

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

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

Future Commitments

None.

ALLOWANCE FOR UNFORESEEN ITEMS

Project Cost

$750,000

Nature of Project

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

Customer Impact

This project provides funds for timely service restoration.

Project Justification

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

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

Future Commitment

None.

TRANSPORTATION

PURCHASE OF VEHICLES AND AERIAL DEVICES

Project Cost

$1,866,000

Nature of Project

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

The following table lists the project costs for 2001:

Category	Cost (000s)	No. of Units
Passenger/Off-Road Vehicles [1]	$711	36
Heavy Fleet Vehicles [2]	1,155	7
Total	**$1,866**	**43**

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

[2] The Heavy Fleet Vehicles category includes the purchase of 7 replacement line trucks.

Customer Impact

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

Project Justification

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

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

Future Commitments

None.

TELECOMMUNICATIONS

FIBRE OPTIC NETWORKING

Project Cost

$384,000

Nature of Project

This project is necessary to achieve increased operating efficiency and power system reliability. The project has two major components. The first component is the replacement of an obsolete communications system serving the Lookout Brook hydroelectric plant. Due to its age and the unavailability of parts and vendor support, this system can no longer be maintained and will be replaced by a fibre optic-based communications system.

The second component of the project involves establishing fibre optic communications links to major substations in the St. John's area. The fibre links will be used for communications and power system protection schemes.

Customer Impact

This project contributes to improved customer service and safety by supporting relay protection systems, and assisting in the maintenance of power system reliability and hydroelectric generation availability.

Project Justification

This project is justified on the basis of power system reliability improvements. The substation component of the project supports faster fault clearing times thus minimizing fault impacts on the power system. The replacement of the Lookout Brook communications system is necessary to ensure the plant continues to operate in a safe and efficient manner.

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

Future Commitments

None.

SUBSTATION TELEPHONE CIRCUIT PROTECTION

Project Cost

$154,000

Nature of Project

This project is necessary to upgrade existing telephone line isolation equipment in substations so as to ensure that the equipment operates properly during electrical fault conditions, and is necessary to maintain a safe working environment. The two-year project that commenced in 1999 has been extended by a year as a result of site inspections that have revealed the need for work additional to that initially identified.

The project involves:

a) the installation of Teleline Isolation by NewTel Communications at four Newfoundland Power substations;

b) the purchase and installation of wireless connections (cellular, satellite or radio) at various substations; and

c) the labour to perform ground potential rise calculations at seven substations.

Customer Impact

This project will ensure adequate protection against electric shocks for employees, customers and equipment in and around Company substations.

Project Justification

Telephone communications in substations are critical for employee safety and efficient operations. NewTel Communications requires Newfoundland Power to carry out a program to replace or protect telephone lines in substations in order for them to continue to provide service to these substations. This project addresses that requirement.

Alternatives to teleline protection equipment, such as wireless communications and fibre optic communication equipment, will be used if they minimize costs.

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.

REPLACE/UPGRADE COMMUNICATIONS EQUIPMENT

Project Cost

$145,000

Nature of Project

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

The project involves:

a) replacement of the telephone switchboard system at Kenmount Road;

b) replacement of mobile VHF radios;

c) upgrading to VHF radio towers;

d) changes to call logging system for Aspect Call Center equipment; and

e) pilot project to introduce wireless data communications between field staff and the main computer system.

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

Customer Impact

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

Project Justification

This project is required to ensure the integrity of the Company's communication system. Equipment is being either replaced or upgraded due to deterioration or technological obsolescence.

REPLACE/UPGRADE COMMUNICATIONS EQUIPMENT (Cont'd)

The pilot project to introduce wireless data communications between the office and field staff provides an opportunity to enhance operating efficiency by providing field staff with remote access to the most current information available with regard to work schedules, problem calls logged or customer billing information.

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.

INFORMATION SYSTEMS

APPLICATION ENHANCEMENTS

Project Cost

$657,000

Nature of Project

This project is necessary to provide enhancements to a variety of computer applications, including enhancements to the Customer Service System, Operations and Engineering applications, the Corporate Reporting system and other smaller applications.

The components of the project are:

a) Several large changes to the Customer Service system including the automated management of post-dated cheques, the automated entry and management of Application for Service contracts, revisions to allow customers more choice in selecting withdrawal dates for the Pre-authorized Payment Plan, improvements to the management of work queues and the pursuit of opportunities for leveraging the capabilities of the ASPECT call management system, Interactive Voice Response and other existing Computer Telephony Integration technologies. ($293,000)

b) Enhancements to Operations and Engineering applications used to manage projects and service requests. ($48,800)

c) Expanded use of the corporate reporting environment implemented in 2000 to provide the financial, human resources and operations areas with the ability to extract information in a more efficient manner and to present this information in customized reports to assist management decision-making. ($94,200)

d) A review of options for the replacement of the Company's handheld meter reading system, which is nearing the end of its useful life. ($48,000)

e) Other small upgrades to various applications. ($173,000)

Customer Impact

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

APPLICATION ENHANCEMENTS (Cont'd)

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.

Future Commitment

None.

APPLICATION ENVIRONMENT

Project Cost

$480,000

Nature of Project

This project is necessary for the acquisition and upgrade of software required to maintain the Company's core applications. These consist primarily of upgrades to software development tools, the Database Management System, Microsoft productivity tools, as well as related software licenses.

The main components of this project are:

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

b) Application Software Upgrades ($67,000)
The Application Software Upgrades are necessary to keep versions of the Oracle database software and Axiant database programming software up-to-date in order to maintain vendor support.

c) Environment Management ($163,000)
Environment Management ensures that application tools, delivery methods and system environments are updated to reflect changing technology and business requirements. The project includes software updates, as well as the associated internal labour.

Customer Impact

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

APPLICATION ENVIRONMENT (Cont'd)

Project Justification

This project is necessary to take advantage of newly developed technology capabilities and to ensure that corporate applications continue to operate in a stable and reliable manner. A program for the proper maintenance of the application environment also ensures the environment has the flexibility to accommodate new requirements.

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

Future Commitment

None.

BUSINESS SUPPORT SYSTEMS

Project Cost

$1,163,000

Nature of Project

This project is necessary for the replacement of the aging and functionally deficient major computer applications used to manage the Company's resources. The systems being replaced are the human resources, payroll, finance, and materials management applications.

Customer Impact

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

Project Justification

The Company's major corporate applications have growing functional shortcomings and are aging to the point where it is necessary to replace them. These applications lack the flexibility required to keep pace with changing business needs, and the cost of maintaining their current functionality is increasing. Further, these applications run on an aging proprietary computer operating system, known as OpenVMS, for which vendor support is expected to decline in the near future. An analysis of the cost of maintaining these critical applications indicates that it is greater than the cost of replacing them.

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

Future Commitments

An expenditure of $443,000 for additional work and performance holdbacks is projected for 2002.

PERSONAL COMPUTER INFRASTRUCTURE

Project Cost

$473,000

Nature of Project

This project is necessary for the replacement or upgrade of personal computers, printers and associated assets that have reached the end of their useful life. Of the Company's total of 562 personal computers, 49 desktop computers and 12 laptop computers will be replaced. This is in keeping with the Company's expectation of a three to four year life cycle for personal computers.

The Company annually reviews its computing requirements in detail as part of its capital budgeting process. In 2001, the effect of staffing and other changes have reduced the requirement for replacements from normal levels. It is expected future PC replacement requirements will increase to more typical levels in the range of 150 to 180.

The project also involves the replacement of 20 laser printers, and the purchase of several printers, scanners and other peripheral equipment.

The following table contains a projection of the number of personal computers in the Company at the end of 2001:

	2000	2001
Beginning of Year		
Desktops	506	472
Laptops	88	90
Added		
Desktops	124	49
Laptops	33	12
Retired		
Desktops	158	49
Laptops	31	12
Total	562	562

PERSONAL COMPUTER INFRASTRUCTURE (Cont'd)

Customer Impact

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

Project Justification

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

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

Future Commitments

None.

INFRASTRUCTURE ENVIRONMENT

Project Cost

$162,000

Nature of Project

This project is necessary to improve the security, monitoring and management capabilities of the existing shared server and network infrastructure. This involves an enhancement of the existing security "firewall" that protects the computing environment from unauthorized access from the outside world over telecommunications systems, in particular, the Internet. In addition, new security analysis and monitoring software will provide reporting of attempted security breaches of the corporate network, and automated reporting of applications problems.

Customer Impact

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

Project Justification

This project is justified on the basis of the need to ensure the availability of critical applications during business hours by maintaining network security and system monitoring and management capabilities at an appropriate level. The ability to identify problems as early as possible minimizes their impact on corporate applications, thus maintaining employee productivity.

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

Future Commitment

None.

SHARED SERVERS INFRASTRUCTURE

Project Cost

$575,000

Nature of Project

This project is necessary to maintain current performance standards on the Company's 49 shared servers and the network infrastructure. This involves the replacement of nine servers, as well as hardware upgrades to the corporate network to replace aging and unsupported shared server and network components with more modern components.

The project includes an expenditure of $270,000 for upgrades to servers and network infrastructure to accommodate the proposed replacement of major corporate applications detailed in the Business Support Systems project described at page 64 of 70 of Schedule B.

Customer Impact

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

Project Justification

This project is justified on the basis of the need to maintain the performance standards of the Company's servers and network infrastructure. Some of the Company's major shared computers are used by as many as 400 employees at one time. Degradation of server and network performance can have a negative impact on employee productivity and on customer service. It could also endanger the integrity of stored corporate data.

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

Future Commitments

None.

INTERNET

Project Cost

$109,000

Nature of Project

The purpose of this project is to improve the Company's Internet site to provide customers with additional options, such as the ability to initiate final meter read requests, and to enable General Service customers to view and download detailed billing information and billing history. The project will also enable the Company to survey customers online, and to better track customer usage of the Internet site.

Customer Impact

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

Project Justification

This project is justified on the basis of customer expectations and efficiencies to be gained in customer service human resource requirements.

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

Future Commitments

None.

Newfoundland Power Inc.
2001 Capital Budget
Leases over $5,000

	Yearly	Term
Printers	$70,000	5 Years

Newfoundland Power Inc.
2001 Capital Budget
Estimate of Future Required Expenditures on
Projects Commenced in 2001
(000s)

Budget Class and Project	2001	2002
Energy Supply		
Relocate Salt Pond Gas Turbine	$30	$2,000
Information Systems		
Business Support Systems	$1,163	$443

Newfoundland Power Inc.
2001 Capital Budget
2000 Capital Budget Variances
(000s)

	Approved by Order No. P.U. 18 (1999-2000)	Forecast	Variance
Energy Supply	$ 8,878	$ 8,557	$ (321)
Substations	3,500	3,760	260
Transmission	1,526	1,564	38
Distribution	16,358	17,668	1,310
General Property	1,585	944	(641)
Transportation	2,390	2,274	(116)
Telecommunications	537	542	5
Information Systems	4,147	3,728	(419)
General Expenses Capital	2,850	2,650	(200)
Total	$ 41,771	$ 41,687	$ (84)
1999 Carry-overs		897 *	
		$ 42,584	

* 1999 Carryovers from Order Nos. P.U. 36 (1998-99), P.U. 6 (1999-2000) and P.U. 18 (1999-2000). Carryovers include: construct Virginia Waters Feeder ($262,000); terminate Virginia Waters feeder at substation ($65,000); and rebuild Old Perlican Feeder ($570,000).

Newfoundland Power Inc.
2001 Capital Budget
Rate Base
(000s)

	Historical Data		Forecast	Forecast
	1998	1999	2000	2001
Plant Investment	$867,270	$897,666	$926,919	$949,906
Deduct:				
Accumulated Depreciation	362,933	380,287	399,844	419,082
Contributions in Aid of Construction	20,048	19,565	19,406	19,618
Deferred Income Taxes	-	-	-	-
Weather Normalization Reserve	(5,022)	(7,362)	(8,186)	(8,186)
	377,959	392,490	411,064	430,514
	489,311	505,176	515,855	519,392
Add - Contributions Country Homes	333	312	300	300
Balance - Current Year	489,644	505,488	516,155	519,692
Balance - Previous Year	471,504	489,644	505,488	516,155
Average	480,574	497,566	510,579 [1]	517,924
Cash Working Capital Allowance	4,413	4,447	4,468	4,464
Materials and Supplies	3,217	3,675	3,677	3,677
Average Rate Base at Year End	$488,204	$505,688	$518,724	$526,065

1. Total does not add due to a reduction of $243,361 (50% of $486,722) to conform to reduction from rate base as ordered by Order No. P.U. 36 (1998-99).

Newfoundland Power Inc.
2001 Capital Budget
Invested Capital

	Forecast 2000		Forecast 2001	
	(000s)	%	(000s)	%
Common Equity	$251,874	44.24%	$258,446	44.25%
Debt	307,559	54.02%	315,759	54.06%
Preferred Equity	9,890	1.74%	9,890	1.69%
Total	$569,080 [1]	100.00%	$584,095	100.00%

1. Total does not add due to a reduction of $243,361 (50% of $486,722) to conform to reduction from rate base as ordered by Order No. P.U. 36 (1998-99).

Newfoundland Power Inc.
2001 Capital Budget
Calculation of Rate of Return on Rate Base

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

$$\textbf{Rate of Return on Rate Base} = \left[\frac{\text{Invested Capital}}{\text{Rate Base}} \times \text{Weighted Average Cost of Capital}\right] + \frac{Z}{\text{Rate Base}}$$

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.).

Test Year 1999 (approved by Order No. P.U. 36 (1998-99)):

$$\textbf{9.98\%} = \left[\frac{\$\ 541{,}288}{\$\ 494{,}723} \times 9.16\%\right] + \frac{\$\ 78 + \$\ 30 - \$\ 328}{\$494{,}723}$$

2000 (approved by Order No. P.U. 18 (1999-2000)):

$$\textbf{10.28\%} = \left[\frac{\$\ 568{,}517}{\$\ 512{,}693} \times 9.31\%\right] + \frac{\$\ 78 + \$\ 30 - \$\ 328}{\$512{,}693}$$

Forecast 2001 rate base and invested capital values and an allowed return on equity of 9.59%:

$$\textbf{10.30\%} = \left[\frac{\$\ 584{,}095}{\$\ 526{,}065} \times 9.31\%\right] + \frac{\$\ 78 + \$\ 30 - \$\ 328}{\$526{,}065}$$