

Newfoundland Power Inc.

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DELIVERED BY HAND

June 29, 2005

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

Attention: G. Cheryl Blundon

Director of Corporate Services

and Board Secretary

Ladies and Gentlemen:

Re: Newfoundland Power's 2006 Capital Budget Application

A. Enclosures

Enclosed are 15 copies of Newfoundland Power Inc.'s ("Newfoundland Power" or the "Company") 2006 Capital Budget Application (the "Application") and supporting materials in 3 volumes (collectively, the "Filing").

B. Description of the Filing

B.1 Overall Organization

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

In addition to these 2 volumes, the Filing includes an *Electrical System Handbook*. The *Electrical System Handbook* is provided to assist those interested in the Filing to better understand the information presented.

The *Electrical System* Handbook essentially describes Newfoundland Power's existing electrical system assets and the engineering terminology and conventions used by the Company to describe them. A cursory review of the *Electrical System Handbook* should facilitate ease of navigation through Volumes I and II of the Filing.

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The *Electrical System Handbook* also includes a map displaying the Newfoundland island generation and transmission grid to permit reasonable identification of the geographic location of proposed capital expenditures.

B.2 Compliance Matters

B.2.1 Board Orders

In Order No. P.U. 43 (2004) (the "2005 Capital Order"), the Board required specific information to be filed with the Application. The Filing complies with the requirements of the 2005 Capital Order.

In Order No. P.U. 35 (2003) (the "2004 Capital Order") required specific information, and in particular a 5-year capital plan, to be provided with the Application. The Filing complies with the requirements of the 2004 Capital Order.

In Order No. P.U. 19 (2003) (the "2003 Rate Order"), the Board required that evidence relating to deferred charges and a reconciliation of average rate base to invested capital be filed with the Application. The Filing complies with the requirements of the 2003 Rate Order.

The Filing contains the following specific reports:

- 1. 2006 Capital Budget Plan: this is found in Volume I and is filed in compliance with the 2004 Capital Order;
- 2005 Capital Expenditure Status Report: this is found in Volume I and is filed in compliance with the 2005 Capital Order;
- 3. Wesleyville Gas Turbine Refurbishment Alternatives: this is found in Volume II (Tab 1.3) and is filed in compliance with the 2005 Capital Order;
- 4. Metering Strategy: this is found in Volume II (Tab 4.1) and is filed in compliance with the 2005 Capital Order;
- 5. Deferred Charges and Rate Base: this is found in Volume II (Tab 7.1) and is filed in compliance with the 2003 Rate Order; and
- 6. A Report on the Asset Rate Base Methodology: this is found in Volume I and is filed in compliance with the 2003 Rate Order.

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B.2.2 The Provisional Guidelines

In its June 2, 2005 Provisional Capital Budget Application Guidelines (the "Provisional Guidelines"), the Board outlined certain directions on how to define and categorize capital expenditures. In the Company's view, the Filing complies with the Provisional Guidelines.

Given this is the initial year of application of the Provisional Guidelines, compliance by the Company necessarily required the exercise of a considerable degree of judgment. In exercising judgment, the Company was influenced by a number of considerations. Primary among those considerations are the competing requirements of consistency and change. The Board's effective exercise of regulatory oversight of capital expenditures requires a level of continuity and consistency from year to year. The Filing is reasonably consistent and comparable with past filings. On the other hand, the Provisional Guidelines represent a distillation of the views of the stakeholders on changes required to improve overall regulatory process. So reasonable progress in the direction indicated in the Provisional Guidelines is necessary for the broader development of efficient process in regulation of capital expenditures. The Filing does represent reasonable progress along these lines.

An example of the practical judgment found in the Filing may be helpful to the Board and stakeholders in understanding the Company's approach to application of the Provisional Guidelines.

In determining the classification of capital projects as either Mandatory, Normal Capital or Justifiable, the Company adopted the classification which best suited the *overall* project. For the Distribution project *Meters*, approximately 22% of total 2006 expenditures are proposed for automated meter reading ("AMR") technology. AMR technology is incrementally more expensive than conventional meter technology. For conventional meter technology, which comprises the bulk of proposed 2006 meter expenditures, least cost is achieved by competitive tendering for what is essentially a commodity. For more expensive AMR technology, further information is required to justify the incremental expenditure. This implies that the proposed AMR technology expenditure might be appropriately classified as a Justifiable capital expenditure as opposed to a Normal Capital expenditure. As a matter of practical judgment, the Company chose to classify the *Meters* project as Normal Capital as it best represented *overall* proposed 2006 meter expenditures. However, given the project mix, the Company has also provided economic analysis to justify the proposed incremental AMR expenditures in *4.1.1 2006 AMR Initiatives*.

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Judgments made by the Company with respect to application of the Provisional Guidelines should be evident from *Schedule B 2006 Capital Projects Explanations*. This was done to ensure transparency in the transitional period contemplated by the Provisional Guidelines.

Section 3 of the 2006 Capital Budget Plan provides a breakdown of the overall 2006 capital budget by definition, classification, costing method and materiality segmentation as described in the Provisional Guidelines.

C. Order Sought in the Application

In the Application, Newfoundland Power essentially seeks (i) approval of a 2006 capital budget in the amount of \$49,258,000; (ii) approval of 2006 leases with annual payments of \$52,000 in a year; and (iii) the fixing and determining of a 2004 rate base in the amount of \$715,111,000.

The Application does not seek approval of forecast values for rate base and invested capital for use in the automatic adjustment formula as it has done in recent Capital Budget Applications.

On June 2, 2005, Newfoundland Power announced settlement of a longstanding tax dispute which concerned its accounting policy for revenue recognition. As a result of this settlement, Newfoundland Power's prospective accounting policy for revenue recognition will be the subject of a separate application expected to be filed by September 2005. Any prospective change in accounting policy for revenue recognition will necessarily affect any Company forecast of invested capital. Accordingly, the matter of the appropriate values for use in the operation of the automatic adjustment formula is best considered in the context of consideration of the Company's accounting policy for revenue recognition.

D. Filing Details and Circulation

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

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

A copy of the Filing has been forwarded directly to Ms. Maureen P. Greene, Q.C. of Newfoundland & Labrador Hydro and Mr. Thomas J. Johnson, the Consumer Advocate.

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E. Concluding

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

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

Yours very truly,

Peter Alteen

Vice President, Regulatory Affairs

& General Counsel

Enclosures

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

> Thomas J. Johnson O'Dea Earle Law Offices

Newfoundland Power Inc. 2006 Capital Budget Application Filing Contents

Volume I Application

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Schedule B 2006 Capital Projects Explanations

Schedule C *Leases*

Schedule D Future Required Expenditures

Schedule E Rate Base

2006 Capital Budget Plan

2005 Capital Expenditure Status Report

A Report on the Asset Rate Base Methodology

Volume II Supporting Materials

Generation

- 1.1 2006 Hydro Plants Facility Rehabilitation
- 1.2 Petty Harbour Hydro Plant Refurbishment
- 1.3 Wesleyville Gas Turbine Refurbishment Alternatives

Substations

- 2.1 2006 Rebuild Substations
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| | | Distribution |
| <i>4.1</i> | Meterin | g Strategy |
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| | 4.2.1 | Botwood- 01 Feeder Study |
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7.1 Deferred Charges and Rate Base

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

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

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

- (a) approving its 2006 Capital Budget of \$49,258,000; and
- (b) fixing and determining its average rate base for 2004 in the amount of \$715,111,000

2006 Capital Budget Application



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

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

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

- (a) approving its 2006 Capital Budget of \$49,258,000; and
- (b) fixing and determining its average rate base for 2004 in the amount of \$715,111,000

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

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

- 1. Newfoundland Power is a corporation duly organized and existing under the laws of the Province of Newfoundland and Labrador, is a public utility within the meaning of the Act, and is subject to the provisions of the *Electrical Power Control Act, 1994*.
- 2. Schedule A to this Application is a summary of Newfoundland Power's 2006 Capital Budget in the amount of \$49,258,000 which includes an estimated amount of \$1,500,000 in contributions in aid of construction that the Applicant intends to demand from its customers in 2006. 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 2006 capital expenditures, by project, which comprise Newfoundland Power's 2006 Capital Budget.
- 4. Schedule C to this Application is a list of leases in excess of \$5,000 per year which Newfoundland Power proposes to proceed with in 2006.
- 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 2006 Capital Budget but will not be completed in 2006.
- 6. The proposed expenditures as set out in Schedules A, B, C and D to this Application are necessary for Newfoundland Power to continue to provide service and facilities which are reasonably safe and adequate and just and reasonable as required pursuant to Section 37 of the Act.

- 7. Schedule E to this Application shows Newfoundland Power's actual average rate base for 2004 of \$715,111,000.
- 8. Communication with respect to this Application should be forwarded to the attention of Ian Kelly, Q.C. and Peter Alteen, Counsel to Newfoundland Power.
- 9. Newfoundland Power requests that the Board make an Order:
 - (a) pursuant to Section 41 of the Act, approving Newfoundland Power's purchase and construction in 2006 of the improvements and additions to its property in the amount of \$49,258,000 as set out in Schedules A and B to the Application;
 - (b) pursuant to Section 41 of the Act, approving Newfoundland Power's lease of improvements to its property in the amount of \$52,000 per year as set out in Schedule C to the Application; and
 - (c) pursuant to Section 78 of the Act, fixing and determining Newfoundland Power's average rate base for 2004 in the amount of \$715,111,000 as set out in Schedule E to the Application.

DATED at St. John's, Newfoundland and Labrador, this 29th day of June, 2005.

NEWFOUNDLAND POWER INC.

Ian Kelly, Q.C. and Peter Alteen

Counsel to Newfoundland Power Inc.

P.O. Box 8910

55 Kenmount Road

St. John's, NL A1B 3P6

Telephone:

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

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

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

- (a) approving its 2006 Capital Budget of \$49,258,000; and
- (b) fixing and determining its average rate base for 2004 in the amount of \$715,111,000

AFFIDAVIT

- I, Phonse Delaney, of St. John's in the Province of Newfoundland and Labrador, Professional Engineer, make oath and say as follows:
- 1. That I am Vice-President, Engineering and Operations, of Newfoundland Power Inc.
- 2. To the best of my knowledge, information and belief, all matters, facts and things set out in this Application are true.

SWORN to before me at St. John's in the Province of Newfoundland and Labrador this 29th day of June, 2005, before me:

Barrister

Phonse Delaney

2006 CAPITAL BUDGET SUMMARY

| Asset Class | Budget (000s) |
|------------------------------|----------------------|
| | |
| 1. Generation – Hydro | \$ 2,825 |
| 2. Generation – Thermal | 120 |
| 3. Substations | 4,040 |
| 4. Transmission | 4,054 |
| 5. Distribution | 26,809 |
| 6. General Property | 1,527 |
| 7. Transportation | 2,755 |
| 8. Telecommunications | 78 |
| 9. Information Systems | 3,500 |
| 10. Unforeseen Allowance | 750 |
| 11. General Expenses Capital | 2,800 |
| Total | <u>\$ 49,258</u> |

2006 CAPITAL PROJECTS (BY ASSET CLASS)

| <u>Ca</u> | pital Projects | Budget (000s) | $\underline{Description}^1$ |
|-----------|--|--------------------------------------|-----------------------------|
| 1. | Generation – Hydro | | |
| | Facility Rehabilitation Plant Refurbishment – Petty Harbour | \$ 996 1,829 | 2 4 |
| | Total – Generation Hydro | \$ 2,825 | |
| 2. | Generation - Thermal | | |
| | Port Aux Basques Fuel Tank Replacement | \$ 120 | 7 |
| | Total – Generation Thermal | \$ 120 | |
| 3. | Substations | | |
| | Rebuild Substations Replacement and Standby Substation Equipment Protection and Monitoring Improvements Additions Due To Load Growth Distribution System Feeder Remote Control | \$ 710 1,918 423 210 779 | 10 12 15 17 19 |
| | Total - Substations | \$ 4,040 | |
| 4. | Transmission | | |
| | Rebuild Transmission Lines | \$ 4,054 | 22 |
| | Total - Transmission | \$ 4,054 | |

¹ Project descriptions can be found in Schedule B at the page indicated.

2006 CAPITAL PROJECTS (BY ASSET CLASS)

| <u>Ca</u> | pital Projects | Budget (000s) | $\underline{Description}^1$ |
|-----------|--|--|--|
| 5. | Distribution | | |
| | Extensions Meters Services Street Lighting Transformers Reconstruction Trunk Feeders Rebuild Distribution Lines Relocate/Replace Distribution Lines For Third Parties Distribution Reliability Initiative Feeder Additions and Upgrades to Accommodate Growth Interest During Construction Total - Distribution | \$ 6,766 1,192 1,851 1,272 5,540 2,849 3,190 685 3,114 266 84 \$ 26,809 | 25 27 30 33 36 38 40 43 45 48 50 |
| 6. | General Property | | |
| | Tools and Equipment Additions to Real Property Standby Diesel Generators – Duffy Place and Clarenville Demand/Load Control – Company Buildings *Total - General Property* | \$ 587 132 665 143 \$ 1,527 | 53 55 57 59 |
| 7. | Transportation | | |
| | Purchase Vehicles and Aerial Devices | \$ 2,755 | 62 |
| | Total - Transportation | \$ 2,755 | |

¹ Project descriptions can be found in Schedule B at the page indicated.

2006 CAPITAL PROJECTS (BY ASSET CLASS)

| Ca | pital Projects | Budget (000s) | | $\underline{Description}^1$ |
|----|--|----------------------|-------|-----------------------------|
| 8. | Telecommunications | | | |
| | Replace/Upgrade Communications Equipment | \$ | 78 | 66 |
| | Total - Telecommunciations | \$ | 78 | |
| 9. | Information Systems | | | |
| | Application Enhancements | \$ | 1,589 | 69 |
| | System Upgrades | | 1,076 | 71 |
| | Personal Computer Infrastructure | | 327 | 73 |
| | Shared Server Infrastructure | | 508 | 76 |
| | Total – Information Systems | \$ | 3,500 | |
| 10 | . Unforeseen Allowance | | | |
| | Allowance for Unforeseen Items | \$ | 750 | 79 |
| | Total – Unforeseen Allowance | \$ | 750 | |
| 11 | . General Expenses Capital | | | |
| | General Expenses Capital | \$ | 2,800 | 81 |
| | Total – General Expenses Capital | \$ | 2,800 | |

¹ Project descriptions can be found in Schedule B at the page indicated.

GENERATION HYDRO

Project Title: Facility Rehabilitation (Pooled)

Project Cost: \$996,000

Project Description

This Generation Hydro project is necessary for the replacement or rehabilitation of deteriorated hydro plant components that have been identified through routine inspections, operating experience and engineering studies. A significant portion of the work will take place at the Heart's Content, Morris, Tors Cove, Victoria, and West Brook plants. The project also includes expenditures necessary to improve the efficiency and reliability of various hydro plants or to maintain environmental compliance.

Details on 2006 proposed expenditures are included in 1.1 2006 Hydro Plants Facility Rehabilitation.

The replacement or rehabilitation of deteriorated components at individual hydro plants are not inter-dependent or related. However, all budget items included in this project are similar in nature and justification, and are therefore pooled for consideration as a single capital project.

Justification

The Company's 23 hydroelectric plants range in age from the 105 year old Petty Harbour Plant to the 7 year old Rose Blanche Plant. These facilities provide energy to the Island Interconnected electrical system. Maintaining these generating facilities and infrastructure reduces the need for additional, more expensive, generation. Also, these generating facilities, in many cases, provide local generation.

Projects involving replacement and rehabilitation work, which are identified during ongoing inspections and maintenance activities, are necessary to the continued operation of hydroelectric generation facilities in a safe, reliable and environmentally compliant manner. The alternative to maintaining these facilities would be to retire them. The Company's hydro generation facilities produce a combined normal annual production of 423.2 GWh.

Replacing only the energy produced by these facilities by increasing production at the Newfoundland and Labrador Hydro's Holyrood generation facility would require approximately 670,000 barrels of fuel annually. At oil prices of \$36.85 per barrel, this translates into approximately \$25 million in annual fuel savings.

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

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | | |
|-------------------------------------|--------------|-------|---------|---------|--|--|--|
| Cost Category | ` ′ | | | | | | |
| Material | \$797 | - | - | - | | | |
| Labour – Internal | 93 | - | - | - | | | |
| Labour – Contract | - | _ | _ | - | | | |
| Engineering | 83 | - | - | - | | | |
| Other | 23 | _ | - | - | | | |
| Total | \$996 | \$830 | \$7,138 | \$8,964 | | | |

Costing Methodology

Table 2 shows the annual expenditures for this project for the most recent five-year period.

| Table 2 | | | | | | |
|--|--|--|--|--|--|--|
| Expenditure History (000s) | | | | | | |
| Year 2001 2002 2003 2004 2005F Total \$1,482 \$2,031 \$2,510 \$1,909 \$2,089 | | | | | | |

The budget estimate for this project is comprised of engineering estimates for the cost of the individual budget items.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Plant Refurbishment - Petty Harbour (Clustered)

Project Cost: \$1,829,000

Project Description

This Generation Hydro project is a major refurbishment of the Company's Petty Harbour Hydroelectric Generating Plant. The refurbishment project will require the upgrade or replacement of major components of the plant, including protection, control and governor systems, as well as a turbine overhaul and the replacement of the coating on the steel penstock, which has begun to deteriorate.

This is a major plant refurbishment which involves a combination of inter-dependent and related components. The project is best undertaken as a single project to minimize plant downtime and maximize the efficiency of the overhaul process. The various components have therefore been clustered as a single capital project.

Details on 2006 proposed expenditures are included in 1.2 Petty Harbour Hydro Plant Refurbishment.

Justification

The normal annual production at Petty Harbour Hydroelectric Generating Plant is approximately 15.9 GWh of energy, or about 3.7 per cent of Newfoundland Power's total hydroelectric generation. The plant is capable of supplying the Town of Petty Harbour-Maddox Cove when isolated from the Island Interconnected System.

The plant was last overhauled in 1986. Two of the plant's three units have experienced poor availability in comparison to the Company's other hydroelectric generators. A recent engineering assessment of the plant revealed a number of deficiencies, including obsolete programmable logic controllers (PLCs), failures with governor systems and other mechanical and electrical protection systems. Upgrades to these units will improve availability for generation and overall customer reliability. In addition, the coating on the steel penstock has begun to deteriorate. The penstock must be treated with an ultraviolet protectant to prevent the penstock from corroding.

A cost benefit analysis of projected capital and operating expenditure requirements for the Petty Harbour Hydroelectric Generating Plant has determined the levelized cost of energy from the plant over the next 25 years to be 2.8 cents per kilowatt-hour, which is significantly less than the cost of replacement energy at Holyrood.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | |
|-------------------------------------|---|----|----|---------|--|--|
| Cost Category | Cost Category 2006 2007 2008 - 2010 Total | | | | | |
| Material | \$1,449 | - | - | - | | |
| Labour – Internal | 143 | - | - | - | | |
| Labour – Contract | - | - | - | - | | |
| Engineering | 182 | - | - | - | | |
| Other | 55 | - | - | - | | |
| Total | \$1,829 | 50 | 20 | \$1,899 | | |

Costing Methodology

The budget for this project is based on an engineering cost estimate.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

GENERATION THERMAL

Project Title: Port aux Basques Fuel Tank Replacement (Other)

Project Cost: \$120,000

Project Description

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

The project proposed for 2006 is the replacement of a 22,700 litre self-dyked storage tank that contains the fuel supply for the Company's 2.5 megawatt diesel generating unit in Port aux Basques.

The Port aux Basques fuel tank is a single-walled tank with no remote monitoring and is 18 years old. It is proposed to replace the tank with a vacuum-sealed, double-walled steel tank that can be remotely monitored on a continuous basis from the System Control Centre.

Justification

As part of the Company's commitment to responsible environmental stewardship, this fuel tank is being replaced with a continuously monitored tank to reduce the risk of a fuel spill.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | |
|---|-------|---|---|-------|--|--|
| Cost Category 2006 2007 2008 - 2010 Total | | | | | | |
| Material | \$95 | - | - | - | | |
| Labour – Internal | 9 | - | - | - | | |
| Labour – Contract | - | - | - | - | | |
| Engineering | 11 | - | - | - | | |
| Other | 5 | - | - | - | | |
| Total | \$120 | _ | - | \$120 | | |

Costing Methodology

The budget amount for this project is based on an engineering cost estimate. To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

SUBSTATIONS

Project Title: Rebuild Substations (Pooled)

Project Cost: \$710,000

Project Description

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

A significant portion of the replacement work will take place at the Laurentian and Topsail substations. Work will be undertaken at a total of 17 substations in 2006.

The individual requirements for the replacement of substation infrastructure are not interdependent. However, they are similar in nature and justification. The expenditures are therefore pooled for consideration as a single capital project.

Details on 2006 proposed expenditures are included in 2.1 2006 Rebuild Substations.

Justification

This project is justified based on the need to maintain safe, reliable electrical service and ensure workplace safety by replacing deteriorated or substandard substation infrastructure.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | | |
|-------------------------------------|---|-------|---------|---------|--|--|--|
| Cost Category | Cost Category 2006 2007 2008 - 2010 Total | | | | | | |
| Material | \$272 | - | - | - | | | |
| Labour – Internal | 185 | - | - | - | | | |
| Labour – Contract | - | - | - | - | | | |
| Engineering | 191 | - | - | - | | | |
| Other | 62 | - | - | - | | | |
| Total | \$710 | \$781 | \$2,509 | \$4,000 | | | |

Costing Methodology

Table 2 shows the annual expenditures and unit costs for this project for the most recent five-year period.

| Table 2 | | | | | | | |
|--------------------------------|----------------------------|-------|-------|-------|-------|--|--|
| | Expenditure History (000s) | | | | | | |
| Year 2001 2002 2003 2004 2005F | | | | | | | |
| Total | \$1,191 | \$687 | \$399 | \$634 | \$697 | | |

The Company has 136 substations varying in age from 4 years to greater than 100 years. The original cost of these substations is in excess of \$100 million. Infrastructure to be replaced was identified as a result of inspections, engineering studies and operating experience.

The budget for this project is comprised of engineering estimates for the cost of individual budget items.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Replacement and Standby Substation Equipment (Pooled)

Project Cost: \$1,918,000

Project Description

This Substations 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, as well as expenditures to respond to situations in substations which require immediate attention to maintain safe and reliable operation of the electrical system.

The work undertaken under the former Transformer Cooling Refurbishment project is similar in nature to the work performed under the Replacement and Standby Substation Equipment project. Both projects involved the necessary refurbishment of substation equipment. Therefore, expenditures for 2006-2010 have been combined and presented as a single project. Historical expenditures have also been combined to enable meaningful comparison.

The individual requirements for replacement and standby substation equipment are not interdependent. However, they are similar in nature and justification. The expenditures are therefore pooled for consideration as a single capital project.

Details on 2006 proposed expenditures are included in 2.2 2006 Replacement and Standby Substation Equipment.

Justification

This project is justified based on the need to ensure reliable electrical service and ensure safety by replacing substation infrastructure as required.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | |
|-------------------------------------|---------|---------|-------------|---------|--|--|
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total | | |
| Material | \$1,050 | - | - | - | | |
| Labour – Internal | 354 | - | - | - | | |
| Labour – Contract | - | - | - | - | | |
| Engineering | 330 | - | - | - | | |
| Other | 184 | - | - | - | | |
| Total | \$1,918 | \$1,387 | \$4,561 | \$7,866 | | |

Costing Methodology

Table 2 shows the annual expenditures for this project for the most recent five-year period.

| Table 2 Expenditure History (000s) | | | | | |
|------------------------------------|-------|---------|---------|---------|---------|
| Year | 2001 | 2002 | 2003 | 2004 | 2005F |
| Replacement of Standby Equipment | \$232 | \$2,716 | \$1,159 | \$1,284 | \$1,079 |
| Transformer Cooling | - | - | - | 255 | 174 |
| Total | \$232 | \$2,716 | \$1,159 | \$1,539 | \$1,253 |

The Company has 136 substations. The major equipment items comprising a substation include power transformers, circuit breakers, reclosers, voltage regulators, potential transformers and battery banks. In total, Newfoundland Power has in service approximately 190 power transformers, 400 circuit breakers, 200 reclosers, 340 voltage regulators, 220 potential transformers, 120 battery banks and 2,500 high voltage switches.

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

The budget estimate is based on equipment inspections and historical replacement requirements, as well as on assessments of the current stock of spare equipment. Identified expenditure requirements totalling \$895,000 included in this project are based on engineering cost estimates.

In addition, an allowance of \$1,023,000 for standby substation equipment and emergency replacements is based on an assessment of historical expenditures for such items.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Protection and Monitoring Improvements (Pooled)

Project Cost: \$423,000

Project Description

This Substations project is necessary to upgrade or add protective relaying equipment and control devices as required to maintain system protection and reliable electrical service.

Significant work will be undertaken at the Riverhead, Trepassey, Salt Pond, New Chelsea and Trinity substations. Work will be undertaken at a total of 60 substations in 2006.

The individual requirements for substation protection and monitoring improvements are not inter-dependent. However, they are similar in nature and justification. The expenditures are therefore pooled for consideration as a single capital project.

Details on 2006 proposed expenditures are included in 2.3 2006 Protection and Monitoring Equipment.

Justification

The proposed improvements to the protection and monitoring systems of the selected substations are necessary to maintain the provision of safe, reliable electrical service.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | |
|---|-------|-------|---------|---------|--|--|
| Cost Category 2006 2007 2008 - 2010 Total | | | | | | |
| Material | \$175 | - | - | - | | |
| Labour – Internal | 111 | - | - | - | | |
| Labour – Contract | - | _ | - | - | | |
| Engineering | 97 | - | - | - | | |
| Other | 40 | - | - | - | | |
| Total | \$423 | \$673 | \$2,370 | \$3,466 | | |

Costing Methodology

Table 2 shows the annual expenditures and unit costs for this project for the most recent five-year period.

| Table 2 | | | | | | | | |
|--------------------------------|-----------------------------------|--|--|--|--|--|--|--|
| | Expenditure History (000s) | | | | | | | |
| Year 2001 2002 2003 2004 2005F | | | | | | | | |
| Total | Total \$283 \$116 \$448 \$57 \$78 | | | | | | | |

The budget for this project is comprised of engineering estimates for the cost of individual budget items.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Additions Due To Load Growth (Pooled)

Project Cost: \$210,000

Project Description

This Substations project involves the addition of radiator cooling fans to increase the transformer capacity of the Pasadena and Big Pond substations. This project also includes preliminary engineering on a proposed Little Rapids Substation planned for construction in 2007.

The individual requirements for additions to substations due to load growth included in this project are not inter-dependent. However, they are similar in nature and justification. The expenditures are therefore pooled for consideration as a single capital project.

Details on 2006 proposed expenditures are included in 2.4 2006 Additions Due to Load Growth.

Justification

The project is justified on the basis of accommodating customer load growth. The proper sizing of equipment is necessary to avoid overloading equipment and to maintain safe, reliable electrical service.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | |
|---|-------|---------|---------|---------|--|--|
| Cost Category 2006 2007 2008 - 2010 Total | | | | | | |
| Material | \$96 | - | - | - | | |
| Labour – Internal | 53 | - | - | - | | |
| Labour – Contract | - | - | - | - | | |
| Engineering | 49 | - | - | - | | |
| Other | 12 | - | - | - | | |
| Total | \$210 | \$1,413 | \$2,599 | \$4,222 | | |

Costing Methodology

Table 2 shows the annual expenditures for this project for the most recent five-year period.

| Table 2 | | | | | | | | |
|--------------------------------|-----------------------------------|--|--|--|--|--|--|--|
| | Expenditure History (000s) | | | | | | | |
| Year 2001 2002 2003 2004 2005F | | | | | | | | |
| Total | Total \$282 \$0 \$261 \$300 \$268 | | | | | | | |

The budget estimate for this project is comprised of engineering estimates of the cost of individual budget items.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Distribution System Feeder Remote Control (Pooled)

Project Cost: \$779,000

Project Description

This Substations project is a continuation of a project initiated in 2002. It involves replacing aging, limited function, electromechanical feeder relays and oil-filled reclosers with modern multi-function electronic relays and reclosers that can be remotely controlled from the System Control Centre (SCC). The Company's electromechanical feeder relays and oil-filled reclosers are, on average, 25 years old and are nearing the end of their useful life.

By the end of 2005, the SCC will have remote control of 64 feeders through new electronic feeder relays and 44 feeders through new reclosers. This represents 36% of all feeders and 53% of feeders which are connected to SCADA.

The individual requirements for the replacement of relays and reclosers are not inter-dependent. However, they are similar in nature and justification. The expenditures are therefore pooled for consideration as a single capital project.

In 2006, 19 feeders at various substations will be automated.

Justification

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

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | |
|---|--------------|-------|---------|---------|--|--|
| Cost Category 2006 2007 2008 - 2010 Total | | | | | | |
| Material | \$198 | - | - | - | | |
| Labour – Internal | 222 | - | - | - | | |
| Labour – Contract | - | - | - | - | | |
| Engineering | 310 | - | - | - | | |
| Other | 49 | - | - | - | | |
| Total | \$779 | \$750 | \$2,250 | \$3,779 | | |

Costing Methodology

Table 2 shows the annual expenditures and unit costs for this project for the most recent five-year period.

| | | Tak | ole 2 | | | | |
|--|----------------------------|-----|-------|--|--|--|--|
| | Expenditure History (000s) | | | | | | |
| Year 2001 2002 2003 2004 2005F Total \$0 \$1,092 \$1,165 \$1,063 \$1,007 | | | | | | | |

The budget for this project is based on engineering cost estimates for individual budget items.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

TRANSMISSION

Project Title: Rebuild Transmission Lines (Pooled)

Project Cost: \$4,054,000

Project Description

This Transmission project involves:

- the rebuilding of the Company's oldest, most deteriorated transmission lines on a priority basis in accordance with the program outlined in the report entitled *3.1 Transmission Line Rebuild Strategy* (\$2,343,000)
- the replacement of poles, crossarms, conductors, insulators and miscellaneous hardware due to deficiencies identified during inspections and engineering reviews. (\$1,561,000)
- work associated with the relocation of transmission lines at the request of third parties. (\$150,000)

Proposed transmission line rebuilding work under the *Transmission Line Rebuild Strategy* totals \$2,343,000 and includes the rebuild of sections of transmission lines 43L (\$1,081,000, see: *3.4 43L Transmission Line Rebuild*), 110L (\$604,000, see: *3.2 110L Transmission Line Rebuild*) and 407L (\$658,000, see: *3.3 407L Transmission Line Rebuild*).

Proposed transmission line rebuilding work due to deficiencies identified during routine inspections and engineering reviews totals \$1,561,000. Work is proposed on a number of transmission lines including 4L, 20L, 100L, 111L, 116L, 123L, 124L, 140L, 146L, 358L and 363L. The largest expenditure in any one line is \$372,000 proposed for transmission 123L (see: 3.5 123L Transmission Line Upgrade).

Justification

Thirty per cent of the Company's 104 transmission lines are in excess of 40 years of age. Many of these lines are experiencing pole, crossarm, conductor, insulator and hardware deterioration. Replacement is required to maintain the strength and integrity of these lines.

This project is justified based on the need to replace deteriorated system infrastructure in order to ensure the continued provision of safe, reliable electrical service.

The portion of this project related to relocations at the request of third parties is justified based on the need to accommodate the legitimate requirements of governments, other utility service providers and the public.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | | | | |
|---|---------|---------|----------|----------|--|--|--|--|--|
| Cost Category 2006 2007 2008 - 2010 Total | | | | | | | | | |
| Material | \$1,577 | - | - | - | | | | | |
| Labour – Internal | 547 | - | - | - | | | | | |
| Labour – Contract | 1,614 | - | - | - | | | | | |
| Engineering | 185 | - | - | - | | | | | |
| Other | | | | | | | | | |
| Total | \$4,054 | \$5,233 | \$16,200 | \$25,487 | | | | | |

Costing Methodology

Table 2 shows the annual expenditures for this project for the most recent five-year period.

| Table 2 | | | | | | | | |
|--|----------------------------|--|--|--|--|--|--|--|
| | Expenditure History (000s) | | | | | | | |
| Year 2001 2002 2003 2004 2005F Total \$2,289 \$2,976 \$4,026 \$1,983 \$2,962 | | | | | | | | |

The budget estimates for the significant rebuilding and upgrade projects are based on engineering cost estimates. The budget estimate for individual projects under \$50,000 is based on an assessment of historical expenditures on such items.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

DISTRIBUTION

Project Title: Extensions (Pooled)

Project Cost: \$6,766,000

Project Description

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

Distribution line extensions and upgrades for new customers and for increased loads are similar in nature and justification. The expenditures are therefore pooled for consideration as a single capital project.

Justification

This project is justified based on the need to address customers' new or additional service requirements.

Projected Expenditures

| Table 1 Project Expenditures (000s) | | | | | | | | |
|---|---------|---------|----------|----------|--|--|--|--|
| Cost Category 2006 2007 2008 - 2010 Total | | | | | | | | |
| Material | \$2,183 | - | - | - | | | | |
| Labour – Internal | 1,618 | - | - | - | | | | |
| Labour – Contract | 2,094 | - | - | - | | | | |
| Engineering | 694 | - | - | - | | | | |
| Other | 177 | - | - | - | | | | |
| Total | \$6,766 | \$6,658 | \$20,415 | \$33,839 | | | | |

Table 2 shows the annual expenditures and unit costs for this project for the most recent five-year period, as well as a projected unit cost for 2006.

| Table 2 Expenditure History and Unit Cost Projection | | | | | | | | |
|--|--------------------------------------|---------|---------|---------|---------|---------|--|--|
| Year | Year 2001 2002 2003 2004 2005F 2006B | | | | | | | |
| Total Exp. (000s) | \$5,404 | \$5,717 | \$6,586 | \$8,406 | \$7,396 | \$6,766 | | |
| Adjusted Cost (000s) ¹ | \$6,116 | \$6,376 | \$7,126 | \$8,736 | \$7,396 | - | | |
| New Customers | 2,906 | 3,485 | 3,833 | 4,294 | 3,771 | 3,402 | | |
| Unit Cost (\$/cust.) | 2,105 | 1,830 | 1,859 | 2,034 | 1,961 | 1,989 | | |

²⁰⁰⁵ Dollars.

The project cost for the connection of new customers is calculated on the basis of historical data. Historical annual expenditures over the most recent five-year period, including the current year, are converted to current-year dollars ("Adjusted Cost") and divided by the number of new customers in each year to derive the annual extension cost per customer in current-year dollars ("Unit Cost"). The average of these unit costs, with unusually high and low data excluded, is modified by the GDP Deflator for Canada before being multiplied by the forecast number of new customers for the budget year to determine the budget estimate. The forecast number of new customers is derived from economic projections provided by independent agencies.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Meters (Pooled)

Project Cost: \$1,192,000

In P.U. Order No. 43 (2004) the Board ordered Newfoundland Power to file, with its 2006 Capital Budget Application, a copy of its study respecting the Company's strategy to assess all aspects of operating and capital expenditure associated with meter reading. This study is filed as **4.1** Metering Strategy.

Project Description

This Distribution project includes the purchase and installation of meters for new customers and replacement meters for existing customers. Table 1 lists the meters required in 2006.

| Table 1 2006 Proposed Meter Acquisition | | | | | |
|---|------------------|--|--|--|--|
| Program | Number of Meters | | | | |
| Energy Only Domestic Meters | 10,350 | | | | |
| Other Energy Only and Demand Meters | 1,248 | | | | |

The expenditures for individual meters are not interdependent. However, because the individual expenditure items are similar in nature and justification, they have been pooled for consideration as a single capital project.

Of the \$1,192,000 cost for meters to be purchased in 2006, approximately \$268,000 will be allocated to purchase meters with automated meter reading (AMR) technology. AMR meters will be installed where it is determined that the higher cost is justified by the savings provided. The benefits associated with such installations are described in **4.1.1** 2006 AMR Initiatives.

Justification

The purchase of new meters is necessary to accommodate customer growth and to replace deteriorated meters. Revenue metering of electrical service is regulated under the *Electricity and Gas Inspection Act (Canada)*. The additional cost associated with expenditures on AMR meters is justified on an economic basis.

Projected Expenditures

| Table 2 Projected Expenditures | | | | | | | | | |
|--------------------------------|---|---------|---------|---------|--|--|--|--|--|
| | | (000s) | | | | | | | |
| Cost Category | Cost Category 2006 2007 2008 - 2010 Total | | | | | | | | |
| Material | \$982 | - | - | - | | | | | |
| Labour – Internal | 165 | - | - | - | | | | | |
| Labour – Contract | 44 | - | - | - | | | | | |
| Engineering | - | - | - | - | | | | | |
| Other | | | | | | | | | |
| Total | \$1,192 | \$1,091 | \$3,478 | \$5,761 | | | | | |

Table 3 shows the annual expenditures for the most recent five-year period, as well as an estimate for 2006.

| Table 3 Expenditure History and Budget Estimate | | | | | | | | |
|---|--------|--------|--------|---------|---------|-------|---------|--|
| Year | 2001 | 2002 | 2003 | 2004 | 2005F | Avg | 2006B | |
| Meter Requirements | | | | | | | | |
| New Connections | 2,906 | 3,485 | 3,833 | 4,294 | 3,771 | - | 3,402 | |
| GRO's/CSO's | 1,904 | 2,270 | 1,455 | 8,544 | 11,960 | - | 6,425 | |
| Other | 916 | 540 | 1,055 | 1,064 | 1,010 | - | 1,771 | |
| | 5,726 | 6,295 | 6,343 | 13,902 | 16,741 | - | 11,598 | |
| Meter Costs | | | | | | | | |
| Actual (000s) | \$ 569 | \$ 674 | \$ 595 | \$1,297 | \$1,343 | - | \$1,192 | |
| Adjusted ¹ (000s) | \$ 624 | \$ 733 | \$ 627 | \$1,324 | \$1,343 | - | _ | |
| Unit Cost ¹ | \$ 109 | \$ 116 | \$ 99 | \$ 95 | \$ 80 | \$100 | \$ 103 | |

¹ 2005 dollars.

The budget estimate for Meters is calculated using the inflation adjusted average historical unit cost per installed meter multiplied by the expected number of meter installations. The expected number of meter installations is based on projected new customer connections, projected requirements to meet Industry Canada regulations and other requirements based on historical trends.

The quantity of meters for *new* customers is based on the Company's forecast of customer growth. The quantity for *replacement* purposes is determined using historical data for retired meters and sampling results from previous years. Sampling and replacement requirements are governed by Compliance Sampling Orders (CSOs) and Government Retest Orders (GROs) issued in accordance with regulations under the *Electricity and Gas Inspection Act (Canada)*.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Services (Pooled)

Project Cost: \$1,851,000

Project Description

This Distribution project involves the installation of service wires to connect new customers to the electrical distribution system. Service wires are low voltage wires that connect the customer's electrical service equipment to the utility's transformers. Also included in this project 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.

The proposed expenditures for new and replacement service lines are similar in nature. The expenditures are therefore pooled for consideration as a single capital project.

Justification

The *new* component of this project is justified based on the need to address customers' new service requirements. The *replacement* component is justified on the basis of the obligation to provide safe, reliable electrical service.

Projected Expenditures

| | | Table 1 | | | | | | |
|---|---------|---------|---------|---------|--|--|--|--|
| Project Expenditures (000s) | | | | | | | | |
| Cost Category 2006 2007 2008 - 2010 Total | | | | | | | | |
| Material | \$557 | - | - | - | | | | |
| Labour – Internal | 1,027 | - | - | - | | | | |
| Labour – Contract | 90 | - | - | - | | | | |
| Engineering | 155 | - | - | - | | | | |
| Other | 22 | - | - | - | | | | |
| Total | \$1,851 | \$1,877 | \$5,831 | \$9,559 | | | | |

Table 2 shows the annual expenditures and unit costs for *new* services for the most recent five-year period, as well as a projected unit cost for 2006.

| Table 2 Expanditure History and Unit Cost Projection | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|--|--|
| Expenditure History and Unit Cost Projection New Services | | | | | | | | |
| Year 2001 2002 2003 2004 2005F 2006 | | | | | | | | |
| Total (000s) | \$1,255 | \$1,293 | \$1,421 | \$1,659 | \$1,654 | \$1,467 | | |
| Adjusted Cost (000s) | \$1,420 | \$1,442 | \$1,538 | \$1,712 | \$1,654 | - | | |
| New Customers | 2,906 | 3,485 | 3,833 | 4,294 | 3,771 | 3,402 | | |
| Unit Cost (\$/cust.) | 489 | 414 | 401 | 399 | 439 | 431 | | |

The project cost for the connection of new customers is calculated on the basis of historical data. For *new* services, historical annual expenditures over the most recent five-year period, including the current year, are converted to current-year dollars ("Adjusted Cost") and divided by the number of new customers in each year to derive the annual services cost per customer in current-year dollars ("Unit Cost"). The average of these unit costs, with unusually high and low data excluded, is modified by the GDP Deflator for Canada before being multiplied by the forecast number of new customers for the budget year to determine the budget estimate. The forecast number of new customers is derived from economic projections provided by independent agencies.

Table 3 shows the annual expenditures and unit costs for *replacement* services for the most recent five-year period, as well as a projected unit cost for 2006.

| Table 3 | | | | | | | | |
|---|--------|--------|--------|--------|--------|--------------------|--|--|
| Expenditure History and Average Cost Projection Replacement Services (000s) | | | | | | | | |
| Year | 2001 | 2002 | 2003 | 2004 | 2005F | 2006B ¹ | | |
| Total | \$ 583 | \$ 550 | \$ 568 | \$ 349 | \$ 471 | \$ 384 | | |
| Exclusions ² | | | | | | | | |
| Adjusted Cost ³ | \$ 364 | \$ 378 | \$ 398 | \$ 362 | \$ 471 | _ | | |

¹ 2006B amount reflects increased customer base.

³ 2005 dollars.

Exclusions in the 2001 to 2003 period included program replacement of underground services in St. John's and program replacement of aerial services in Lark Harbour and Port aux Basques.

The process of estimating the budget requirement for *replacement* services is similar to that for *new* services, except the budget estimate is based on the historical average of the total cost of replacement services, as opposed to a unit cost. To ensure consistency from year to year, expenditures related to planned service replacement programs are excluded from the calculation of the historical average.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Street Lighting (Pooled)

Project Cost: \$1,272,000

Project Description

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

The proposed expenditures for new and replacement street lights are similar in nature. The expenditures are therefore pooled for consideration as a single capital project.

Justification

The *new* component of this project is justified based on the need to address customers' new street light requirements. The *replacement* component is justified on the basis of the obligation to provide safe, reliable electrical service.

Projected Expenditures

| | Table 1 | | | | | | | | |
|---|-----------------------------|---------|---------|---------|--|--|--|--|--|
| | Project Expenditures (000s) | | | | | | | | |
| Cost Category 2006 2007 2008 - 2010 Total | | | | | | | | | |
| Material | \$689 | - | - | - | | | | | |
| Labour – Internal | 453 | - | - | - | | | | | |
| Labour – Contract | 98 | - | - | - | | | | | |
| Engineering | 19 | - | - | - | | | | | |
| Other | | | | | | | | | |
| Total | \$1,272 | \$1,273 | \$3,971 | \$6,516 | | | | | |

Table 2 shows the annual expenditures and unit costs for *new* street lights for the most recent five-year period, as well as a projected unit cost for 2006.

| Table 2 | | | | | | | | |
|---|--------|--------|--------|---------|--------|--------|--|--|
| Expenditure History and Unit Cost Projection New Street Lights | | | | | | | | |
| Year | 2001 | 2002 | 2003 | 2004 | 2005F | 2006B | | |
| Total (000s) | \$ 622 | \$ 839 | \$ 892 | \$1,020 | \$ 968 | \$ 871 | | |
| Adjusted Cost (000s) | \$ 704 | \$ 936 | \$ 965 | \$1,058 | \$ 968 | - | | |
| New Customers | 2,906 | 3,485 | 3,833 | 4,294 | 3,771 | 3,402 | | |
| Unit Cost (\$/cust.) | 242 | 269 | 252 | 246 | 257 | 256 | | |

The project cost for the connection of new customers is calculated on the basis of historical data. For *new* street lights, historical annual expenditures over the most recent five-year period, including the current year, are converted to current-year dollars ("Adjusted Cost") and divided by the number of new customers in each year to derive the annual street light cost per customer in current-year dollars ("Unit Cost"). The average of these unit costs, with unusually high and low data excluded, is modified by the GDP Deflator for Canada before being multiplied by the forecast number of new customers for the budget year to determine the budget estimate. The forecast number of new customers is derived from economic projections provided by independent agencies.

Table 3 shows the annual expenditures and unit costs for *replacement* street lights for the most recent five-year period, as well as a projected unit cost for 2006.

| Table 3 | | | | | | | |
|--|-------|-------|-------|-------|-------|--------------------|--|
| Expenditure History and Average Cost Projection Replacement Street Lights | | | | | | | |
| Year | 2001 | 2002 | 2003 | 2004 | 2005F | 2006B ¹ | |
| Total (000s) | \$313 | \$360 | \$395 | \$379 | \$545 | \$401 | |
| Exclusions ² (000s) | - | - | - | - | \$140 | _ | |
| Adjusted Cost ³ (000s) | \$354 | \$402 | \$427 | \$393 | \$405 | - | |

¹ 2006B amount reflects increased fixture base.

Exclusions in 2005 reflect the Company's program replacement of underground wiring for streetlights in the St. John's area at a cost of \$140,000.

³ 2005 dollars.

The process of estimating the budget requirement for *replacement* street lights is similar to that for *new* street lights, except the budget estimate is based on the historical average of the total cost of replacement street lights, as opposed to a unit cost. The estimate is based on historical annual expenditures for the replacement of damaged, deteriorated or failed street lights. For the 2006 budget estimate, the costs associated with an extraordinary program were excluded from the forecast expenditures for 2005.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Transformers (Pooled)

Project Cost: \$5,540,000

Project Description

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

Transformers requirements are similar in nature and justification. The expenditures are therefore pooled for consideration as a single capital project.

Justification

This project is justified on the basis of the obligation to meet customers' electrical service requirements and the need to replace defective or worn out electrical equipment in order to maintain a safe, reliable electrical system.

Projected Expenditures

| Table 1 Project Expenditures (000s) | | | | | | |
|---|---------|---------|----------|----------|--|--|
| Cost Category 2006 2007 2008 - 2010 Total | | | | | | |
| Material | \$5,540 | - | - | - | | |
| Labour – Internal | - | _ | - | - | | |
| Labour – Contract | - | _ | - | - | | |
| Engineering | - | _ | - | - | | |
| Other | - | _ | - | - | | |
| Total | \$5,540 | \$5,400 | \$16,200 | \$27,140 | | |

Table 2 shows the annual expenditures for the most recent five-year period, as well as an estimate for 2006.

| Table 2 | | | | | | | |
|---|--|---------|---------|---------|---------|---|--|
| | Expenditure History and Budget Estimate (000s) | | | | | | |
| Year | | | | | | | |
| Total \$4,550 \$5,194 \$5,529 \$5,449 \$4,739 \$5,540 | | | | | | | |
| Adjusted Cost ¹ | \$4,962 | \$5,625 | \$5,800 | \$5,545 | \$4,739 | - | |

¹ 2005 Dollars

The process of estimating the budget requirement for Transformers is based on a historical average. Historical annual expenditures related to distribution transformers over the most recent five-year period, including the current year, are converted to current-year dollars ("Adjusted Cost") and modified by the GDP Deflator for Canada for the budget year to determine the budget estimate.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Reconstruction (Pooled)

Project Cost: \$2,849,000

Project Description

This Distribution project involves the replacement of deteriorated or damaged distribution structures and electrical equipment. This project is comprised of smaller unplanned projects that are identified during the budget year as a result of line inspections, or recognized during follow-up on operational problems, including power interruptions and customer trouble calls. This project consists of high priority projects that cannot be deferred to the next budget year.

Distribution Reconstruction requirements are similar in nature and justification. The expenditures are therefore pooled for consideration as a single capital project.

This project differs from the Rebuild Distribution Lines project, which involves rebuilding sections of lines that are identified and planned in advance of the annual capital budget preparation.

Justification

This project is justified on the basis of the need to replace defective or deteriorated electrical equipment in order to maintain a safe, reliable electrical system.

Projected Expenditures

| Table 1 Project Expenditures (000s) | | | | | | |
|---|----------|---------|---------|----------|--|--|
| Cost Category 2006 2007 2008 - 2010 Total | | | | | | |
| Material | \$674 | - | - | - | | |
| Labour – Internal | 1,147 | - | - | - | | |
| Labour – Contract | 643 | - | - | - | | |
| Engineering | 288 | - | - | - | | |
| Other | Other 97 | | | | | |
| Total | \$2,849 | \$2,700 | \$8,798 | \$14,347 | | |

Table 2 shows the annual expenditures and costs in current dollars for the most recent five year period, as well as the projected expenditure for 2006.

| Table 2 | | | | | | | |
|---|---------|---------|---------|---------|---------|--------------------|--|
| Expenditure History and Budget Estimate (000s) | | | | | | | |
| Year | 2001 | 2002 | 2003 | 2004 | 2005F | 2006B ¹ | |
| Total \$2,547 \$2,878 \$2,846 \$2,420 \$2,758 \$2,948 | | | | | | | |
| Adjusted Cost ² | \$2,879 | \$2,956 | \$2,914 | \$2,509 | \$2,758 | _ | |

¹ 2006B amount reflects increased customer base.

The process of estimating the budget requirement for Reconstruction is based on a historical average. Historical annual expenditures related to unplanned repairs to distribution feeders over the most recent five-year period, including the current year, are converted to current-year dollars ("Adjusted Cost") and modified by the GDP Deflator for Canada for the budget year to determine the budget estimate.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

² 2005 dollars.

Project Title: Rebuild Distribution Lines (Pooled)

Project Cost: \$3,190,000

Project Description

This Distribution project involves the replacement of deteriorated distribution structures and electrical equipment that have been previously identified through ongoing line inspections, engineering reviews, or day to day operations.

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

The work for 2006 includes feeder improvements on 47 of the Company's 302 feeders, as well as the replacement of deteriorated padmount transformers and underground services.

While the various components of the project are not inter-dependent, they are similar in nature and justification. The expenditures are therefore pooled for consideration as a single capital project.

Justification

This project is justified on the basis of maintaining a safe, reliable electrical system.

The Company has over 8,200 kilometres of distribution lines in service and has an obligation to maintain this plant in good condition to safeguard the public and its employees and to maintain reliable electrical service. The replacement of deteriorated distribution structures and equipment is an important element of this obligation.

Projected Expenditures

| Table 1 | | | | | | |
|---|-----------------------------|---------|----------|----------|--|--|
| | Project Expenditures (000s) | | | | | |
| Cost Category 2006 2007 2008 - 2010 Total | | | | | | |
| Material | \$1,540 | - | - | - | | |
| Labour – Internal | 1,292 | - | - | - | | |
| Labour – Contract | 183 | - | - | - | | |
| Engineering | 24 | - | - | - | | |
| Other 151 | | | | | | |
| Total | \$3,190 | \$3,688 | \$11,710 | \$18,588 | | |

Table 2 shows the annual expenditures for this project for the most recent five-year period.

| Table 2 | | | | | | | |
|--|----------------------------|--|--|--|--|--|--|
| | Expenditure History (000s) | | | | | | |
| Year 2001 2002 2003 2004 2005F Total \$2,223 \$3,210 \$3,351 \$3,382 \$5,004 | | | | | | | |

Distribution feeders are inspected in accordance with Newfoundland Power's distribution inspection standards to identify:

- a) Deficiencies that are a risk to public or employee safety, or that are likely to result in imminent failure of a structure or hardware;
- b) Locations where lightning arrestors are required as per the 2003 Lightning Arrestor Review:¹
- c) Locations where CP8080 and 2-piece insulators still exist. These insulators have a history of failure;²
- d) Locations where current limiting fuses are required in accordance with the internal memo dated January 11, 2000;³ and
- e) Hardware for which a high risk of failure has been identified, such as automatic sleeves and porcelain cutouts.⁴

The budget estimate is based on detailed engineering estimates of individual rebuild requirements.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

See the 2004 Capital Budget Application, Volume III, Distribution, Appendix 2, Attachment B for further detail on lightning arrestor requirements.

See the 2004 Capital Budget Application, Volume III, Distribution, Appendix 2, Attachment C for further detail on problem insulators.

See the 2004 Capital Budget Application, Volume III, Distribution, Appendix 2, Attachment D for further detail on current limiting fuse requirements.

See the 2004 Capital Budget Application, Volume III, Distribution, Appendix 2, Attachment E and Attachment F for further detail on automatic sleeves and porcelain cutouts.

Project Title: Relocate/Replace Distribution Lines For Third Parties (Pooled)

Project Cost: \$685,000

Project Description

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

The Company's response to requests for relocation and replacement of distribution facilities by governments and other utility service providers is governed by the provisions of agreements in place with the requesting parties.

While the individual requirements are not inter-dependent, they are similar in nature and justification, and are therefore pooled for consideration as a single capital project.

Justification

This project is justified on the basis of the need to respond to legitimate requirements for plant relocations resulting from third party activities.

Projected Expenditures

| Table 1 Project Expenditures (000s) | | | | | | |
|---|-------|-------|---------|---------|--|--|
| Cost Category 2006 2007 2008 - 2010 Total | | | | | | |
| Material | \$240 | - | - | - | | |
| Labour – Internal | 219 | - | - | - | | |
| Labour – Contract | 144 | - | - | - | | |
| Engineering | 70 | - | - | - | | |
| Other | | | | | | |
| Total | \$685 | \$568 | \$1,836 | \$3,089 | | |

Table 2 shows the annual expenditures for this project for the most recent five-year period.

| Table 2 | | | | | | |
|-------------------------------------|-------|-------|-------|-------|-------|--|
| Expenditure History (000s) | | | | | | |
| Year | 2001 | 2002 | 2003 | 2004 | 2005F | |
| Total \$585 \$390 \$330 \$440 \$698 | | | | | | |
| Adjusted Cost ¹ | \$662 | \$435 | \$357 | \$456 | \$698 | |

²⁰⁰⁵ dollars.

The budget estimate is based on historical expenditures and specific project estimates for extraordinary requirements. Generally these expenditures are associated with a number of small projects that are not specifically identified at the time the budget is prepared. Historical annual expenditures related to distribution line relocations and replacements over the most recent five-year period, including the current year, are converted to current-year dollars ("Adjusted Cost") and modified by the GDP Deflator for Canada for the budget year to determine the budget estimate. The estimate based on historical costs is further adjusted for significant expenditure requirements judged to be extraordinary. The 2006 budget estimate includes an allowance of \$155,000 for an expected increase in distribution work resulting from projects initiated by telecommunications companies.

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

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Distribution Reliability Initiative (Pooled)

Project Cost: \$3,114,000

Project Description

The Distribution project involves the replacement of deteriorated poles, conductor and hardware to reduce both the frequency and duration of power interruptions to the customers served by specific distribution lines. The nature of the upgrading work follows from a detailed assessment of past service 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. Options are evaluated to improve reliability performance and project plans are subsequently developed from an engineering analysis.

Table 1 identifies the feeders selected for upgrading in 2006 and indicates the number of customers affected, and the average unscheduled distribution yearly interruption statistics for the five-year period ending December 31, 2004. These SAIFI and SAIDI statistics exclude planned power interruptions and interruptions due to all causes other than distribution system failure. An analysis of each feeder to be upgraded is contained in 4.2 2005 Corporate Distribution Reliability Review, Appendix B.

| Table 1 |
|---|
| Feeders Proposed for Upgrading Distribution Interruption Statistics |

Tabla 1

| | Number of | Distribution | Distribution |
|---------------------------------|-----------|--------------------|--------------------|
| Feeder | Customers | SAIFI ¹ | SAIDI ² |
| Bell Island (BCV-02) | 1,530 | 4.91 | 7.65 |
| Botwood (BOT-01) | 1,607 | 3.15 | 7.90 |
| Lewisporte (LEW-02) | 1,550 | 3.98 | 6.82 |
| Carmanville/Gander Bay (GBY-02) | 888 | 2.56 | 6.86 |
| Greenspond (GPD-01) | 233 | 2.26 | 14.88 |
| Glovertown (GLV-02) | 1,222 | 3.02 | 7.60 |
| Summerville (SMV-01) | 1,016 | 3.75 | 8.01 |
| Company Average | - | 1.59 | 2.13 |

System Average Interruption Frequency Index (SAIFI) calculated by dividing the number of customers that have experienced an outage by the total number of customers in an area. Distribution SAIFI records the average number of outages related to distribution system failure.

System Average Interruption Duration Index (SAIDI) 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. Distribution SAIDI records the average hours of outage related to distribution system failure.

While the work on different feeders is not inter-dependent, the various components of this project are similar in nature and justification. The expenditures are therefore pooled for consideration as a single capital project.

Justification

This project is justified on the basis of ensuring appropriate levels of service reliability to customers. Customers supplied by these feeders experience power interruptions more often, or of longer duration, than the Company average. Individual feeder projects have been prioritized based on their historic SAIFI and SAIDI statistics.

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

Projected Expenditures

Table 2 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 2 Project Expenditures (000s) | | | | | |
|---|---------|---------|---------|---------|--|
| Cost Category 2006 2007 2008 - 2010 Total | | | | | |
| Material | \$1,040 | - | - | - | |
| Labour – Internal | 1,041 | - | - | - | |
| Labour – Contract | 521 | - | - | - | |
| Engineering | 53 | - | - | - | |
| Other 459 | | | | | |
| Total | \$3,114 | \$1,711 | \$2,406 | \$7,231 | |

Cost Methodology

Table 3 shows the annual expenditures for this project for the most recent five-year period.

| | | Tak | ole 3 | | |
|---------------|-----------------|-----------------|---------------------|---------------|----------------|
| | | - | ıre History 00s) | | |
| Year Total | 2001 \$3,422 | 2002 \$1,092 | 2003 \$1,546 | 2004 \$763 | 2005F \$873 |

The budget estimate is based on detailed engineering estimates of individual feeder upgrade requirements.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Feeder Additions and Upgrades to Accommodate Growth (Pooled)

Project Cost: \$266,000

Project Description

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

The work for 2006 includes the reconductoring of a portion of a feeder at Glendale Substation and the installation of voltage regulators to facilitate offloading of Bay Roberts substation transformers.

Details on 2006 proposed expenditures are included in 4.3 Feeder Additions and Upgrades to Accommodate Growth.

While the two components of the project are not inter-dependent, they are similar in nature and justification. The expenditures are therefore pooled for consideration as a single capital project.

Justification

This project is justified based on the obligation to provide safe, reliable electric service.

Forecast and actual peak load conditions and customer growth indicate that these projects are warranted in order to maintain the electrical system within recommended guidelines. This project is required to maintain voltage regulation (Bay Roberts) and conductor loading (Glendale) within recommended guidelines.

Projected Expenditures

| | P | Table 1 roject Expenditur (000s) | es | |
|-------------------|--------------|--|-------------|-------|
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total |
| Material | \$151 | - | - | - |
| Labour – Internal | 26 | - | - | - |
| Labour – Contract | 79 | - | - | - |
| Engineering | 5 | - | - | - |
| Other | 5 | - | - | - |
| Total | \$266 | \$185 | \$385 | \$836 |

Table 2 shows the annual expenditures for this project for the most recent five-year period.

| | | Tak | ole 2 | | |
|-------|------------|------------|---------------------|-------|-------|
| | | = | ıre History 00s) | | |
| Year | 2001 | 2002 | 2003 | 2004 | 2005F |
| Total | \$0 | \$0 | \$454 | \$702 | \$171 |

The budget estimate is based on detailed engineering estimates of the individual project components.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Interest During Construction (Pooled)

Project Cost: \$84,000

Project Description

This Distribution project is an allowance for 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.

Justification

The interest incurred during construction is justified on the same basis as the distribution work orders to which it relates.

Projected Expenditures

Table 1 provides the breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| | D _w | Table 1 | was | |
|-------------------|----------------|---------|-------------|-------|
| | П | (000s) | res | |
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total |
| Material | - | - | - | - |
| Labour – Internal | - | - | - | - |
| Labour – Contract | - | - | - | - |
| Engineering | - | - | - | - |
| Other | \$84 | - | - | - |
| Total | \$84 | \$84 | \$252 | \$420 |

Cost Methodology

Table 2 shows the annual expenditures for the most recent five-year period, as well as an estimate for 2006. The 2005 forecasted amount and the 2006 budget amount are based on the average of the annual expenditures for the period 2001 to 2004.

| Table 2 | | | | | | | |
|--|------|------------------------|---------------|--------|--|--|--|
| | Expe | nditure History (00 | and Budget Es | timate | | | |
| Year 2001 2002 2003 2004 2005F Total \$78 \$80 \$74 \$66 \$100 | | | | | | | |

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

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

GENERAL PROPERTY

Project Title: Tools and Equipment (Pooled)

Project Cost: \$587,000

Project Description

This General Property project is required to add or replace tools and equipment used in providing safe, reliable electrical service. Users of tools and equipment include line staff, engineering technicians, engineers and electrical and mechanical tradespersons. The majority of these tools are used in normal day to day operations. As well, specialized tools and equipment are required to maintain, repair, diagnose or commission Company assets required to deliver service to customers.

Individual requirements for the addition or replacement of tools and equipment are not interdependent. However, the expenditure requirements are similar in nature and justification. They are therefore pooled for consideration as a single capital project.

All items within this project involve expenditures of less than \$50,000. These items are consolidated into the following categories:

- 1. Operations Tools and Equipment (\$231,000): This is the replacement of tools and equipment used by line and field technical staff in the day to day operations of the Company. These tools are maintained on a regular basis. However, over time they degrade and wear out, especially hot line equipment which must meet rigorous safety requirements. Where appropriate, such tools will be replaced with battery and hydraulic alternatives to improve productivity and working conditions.
- 2. Engineering Tools and Equipment (\$306,000): This project includes engineering test equipment, tools and substation portable grounds used by electrical and mechanical maintenance personnel and engineering technicians. Engineering test equipment is required to perform system calibration, commissioning and testing of power system facilities and testing and analysis of associated data communications facilities.
- 3. Office Furniture (\$50,000): This project is the replacement of office furniture that has deteriorated. The Company has approximately 600 full time equivalents. The office furniture utilized by these employees deteriorates through normal use and needs to be replaced.

Justification

Suitable tools and equipment in good condition enable staff to perform work in a safe, effective and efficient manner.

Additional or replacement tools are purchased to either maintain or improve quality of work and overall operational efficiency.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | |
|-------------------------------------|--------------|-------|-------------|---------|--|--|
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total | | |
| Material | \$449 | - | - | - | | |
| Labour – Internal | - | - | - | - | | |
| Labour – Contract | - | - | - | - | | |
| Engineering | 9 | - | - | - | | |
| Other | 129 | - | - | - | | |
| Total | \$587 | \$598 | \$1,859 | \$3,044 | | |

Costing Methodology

Table 2 shows the annual expenditures for this project for the most recent five-year period.

| | | Tak | ole 2 | | | |
|--|--|-----|---------------------|--|--|--|
| | | - | ire History 00s) | | | |
| Year 2001 2002 2003 2004 2005F Total \$537 \$378 \$865 \$570 \$631 | | | | | | |

The project cost is based on an assessment of historical expenditures for the replacement of tools and equipment that become broken or worn out, and adjusted for anticipated expenditure requirements for extraordinary items.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Additions to Real Property (Pooled)

Project Cost: \$132,000

Project Description

This General Property project consists of the following 4 items, each of which involves expenditures of less than \$50,000:

- 1. *UPS Room Cooling System, Duffy Place*: The room housing the uninterruptible power supply (UPS) at the Company's Duffy Place building does not have an air conditioning system. The UPS batteries generate heat, causing the temperature in the room to be above design requirements reducing the service life of the batteries. An air conditioning system is required to lower the ambient temperature to ensure reliability of the UPS system.
- 2. Storage Sheds for Treated Cross-arms: Newfoundland Power uses preservative-treated cross-arms for its distribution and transmission lines. Storage sheds are required to ensure contamination from the treated timbers does not enter the ground at sites where they are stored.
- 3. *Washroom Upgrades*: Refurbishment is required in several washrooms at the Company's Kenmount Road building.
- 4. *General Building Upgrades*: The Company has in excess of 20 office buildings and other buildings. There is an ongoing requirement to upgrade or replace equipment and facilities at these buildings due to failure or normal deterioration. This project includes an allowance for the cost of such work as the need arises to ensure the continued safe operation of Company facilities and workplaces.

The individual budget items are not inter-dependent. However, they are similar in nature and are therefore pooled for consideration as a single capital project.

Justification

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

Projected Expenditures

| Table 1 Project Expenditures (000s) | | | | | | |
|-------------------------------------|-------|-------|-------------|---------|--|--|
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total | | |
| Material | \$116 | - | - | - | | |
| Labour – Internal | 4 | - | - | - | | |
| Labour – Contract | - | - | - | - | | |
| Engineering | 8 | - | - | - | | |
| Other | 4 | - | - | - | | |
| Total | \$132 | \$335 | \$1,571 | \$2,038 | | |

Table 2 shows the annual expenditures for this project for the most recent five-year period, as well as a projected unit cost for 2006.

| | Table 2 | | | | | | |
|--------------------------------|----------------------------|-------|-------|-------|-------|--|--|
| | Expenditure History (000s) | | | | | | |
| Year 2001 2002 2003 2004 2005F | | | | | | | |
| Total | \$407 | \$337 | \$237 | \$336 | \$346 | | |

The budget estimate for this project is comprised of engineering estimates of the cost of the individual budget items, as well as an allowance for general building upgrades based on historical expenditure levels.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Standby Diesel Generators – Duffy Place & Clarenville (Pooled)

Project Cost: \$665,000

Project Description

This General Property project consists of the installation of a new diesel generating unit to provide a back-up power supply at the Company's Duffy Place building. The diesel generating unit at Duffy Place will be relocated to the Clarenville building.

The purchase and relocation cost of the diesel generators are inter-dependent.

Details on 2006 proposed expenditures are included in 5.1, *Standby Generation at Newfoundland Power Facilities*.

Justification

This project is necessary to ensure electrical service at Company buildings is not interrupted during a widespread outage. This will allow the Company to carry on operations in a normal fashion during extended power outages, thereby facilitating the restoration of electrical service to customers as quickly as possible.

Projected Expenditures

| | | Table 1 | | |
|-------------------|-------|---------------------------|-------------|---------|
| | Pr | oject Expenditu (000s) | res | |
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total |
| Material | \$656 | - | - | - |
| Labour – Internal | 4 | - | - | - |
| Labour – Contract | - | - | - | - |
| Engineering | 5 | - | - | - |
| Other | - | - | - | - |
| Total | \$665 | \$450 | \$200 | \$1,315 |

Costing Methodology

The budget estimate for this project is comprised of engineering estimates of the cost of the individual budget items.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

Project Title: Demand/Load Control – Company Buildings (Other)

Project Cost: \$143,000

Project Description

This General Property project involves the upgrading of existing electrical supply metering and control at ten Company office buildings to facilitate load control at times of system peak. The locations include the Kenmount Road building, the System Control Centre at Topsail Rd., and area offices in St. John's, Carbonear, Salt Pond, Clarenville, Gander, Grand Falls-Windsor, Corner Brook and Stephenville.

The proposed project involves adding load control devices and replacing the existing metering at the noted locations with electronic versions capable of two-way communication via the existing SCADA infrastructure. At times when a system peak is anticipated, it will be possible to initiate load control action through the SCADA system and poll the affected sites to verify the effectiveness of the initiative. Following system peak, these non-critical loads will be switched back on by a pre-determined schedule.

The demand and load control facilities at individual buildings are not inter-dependent. However, this is a networked system with a central control facility and peripheral equipment at each location. It is therefore appropriate that it be considered as a single capital project.

Details on 2006 proposed expenditures are included in 5.2 2006 Load Control Initiative.

Justification

With the implementation of an automated monitoring and control system, the Company will be able, with minimal manual intervention, to achieve better control of electrical demand and load at Company facilities at times of system peak. The control infrastructure, once in place, will allow for future expansion to other Company facilities in subsequent years.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | | |
|-------------------------------------|-------|------|-------------|-------|--|--|--|
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total | | | |
| Material | \$118 | - | - | - | | | |
| Labour – Internal | 13 | - | - | - | | | |
| Labour – Contract | - | - | - | - | | | |
| Engineering | 9 | - | - | - | | | |
| Other | 3 | - | - | - | | | |
| Total | \$143 | - | - | \$143 | | | |

Costing Methodology

The budget estimate for this project is based on an engineering estimate.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

TRANSPORTATION

Project Title: Purchase Vehicles and Aerial Devices (Pooled)

Project Cost: \$2,755,000

Project Description

This Transportation project involves the necessary replacement of heavy fleet vehicles, as well as passenger and off-road vehicles. Detailed evaluation of the units to be replaced indicates they have reached the end of their useful lives.

Table 1 lists the units to be acquired in 2006.

| Table 1 2006 Proposed Vehicle Replacements | | | | | | |
|--|---------------|--|--|--|--|--|
| Category | No. of Units | | | | | |
| Heavy fleet vehicles ¹ Passenger vehicles ² Off-road vehicles ³ Total | 10 23 9 | | | | | |

The expenditures for individual vehicle replacements are not inter-dependent. However, they are similar in nature and justification. The expenditures are therefore pooled for consideration as a single capital project.

Justification

This project is justified on the basis of the need to replace existing capital items that have reached the end of their useful service lives. All items to be replaced are necessary components in the provision of electrical service.

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

² The Passenger Fleet vehicles category includes the purchase of cars, and light duty trucks.

³ The off-road category includes snowmobiles, ATVs and trailers.

Project Expenditures

Table 2 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 2 | | | | | | | | |
|-------------------------------|---------|---------|-------------|----------|--|--|--|--|
| Projected Expenditures (000s) | | | | | | | | |
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total | | | | |
| Material | \$2,699 | - | - | - | | | | |
| Labour – Internal | 47 | - | - | - | | | | |
| Labour – Contract | - | - | - | - | | | | |
| Engineering | - | - | - | - | | | | |
| Other | 9 | - | - | _ | | | | |
| Total | \$2,755 | \$2,703 | \$7,737 | \$13,195 | | | | |

Table 3 shows the expenditures for this project for the most recent five-year period.

| Table 3 | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|
| Expenditure History | | | | | | | | | |
| Year (000s) | | | | | | | | | |

Costing Methodology

Newfoundland Power individually evaluates all vehicles considered for replacement according to a number of criteria to ensure replacement is the least cost option.

Evaluation for replacement is initiated when individual vehicles reach a threshold age or level of usage. Heavy fleet vehicles are considered for replacement at 10 years of age or usage of 250,000 kilometres. For passenger vehicles the guideline is age of 5 years or 150,000 kilometres.

Vehicles reaching the threshold are evaluated on a number of criteria, such as overall condition, maintenance history and immediate repair requirements, to determine whether they have reached the end of their useful service lives. Based on such evaluation, it has been determined that each unit proposed for replacement has reached the end of its useful life.

New vehicles are acquired through competitive tendering to ensure the lowest possible cost consistent with safe, reliable service.

Future Commitments

This is not a multi-year project; however, the timing of delivery of some of the new vehicles may result in expenditures subsequent to the end of 2006.

TELECOMMUNICATIONS

Project Title: Replace/Upgrade Communications Equipment (Pooled)

Project Cost: \$78,000

Project Description

This Telecommunications project involves the replacement and/or upgrade of communications equipment, including radio communication equipment and communications equipment associated with electrical system control.

Where practical, equipment is repaired and deficiencies rectified. However, where it is not feasible to repair equipment or correct deficiencies, replacement is required.

The Company has approximately 340 mobile radios in service. Each year approximately 20 units break down and are replaced with more reliable units.

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

Justification

Reliable communications equipment is essential to the provision of safe, reliable electrical service. Communications towers must comply with safety codes and standards to ensure employee and public safety.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | | | |
|-------------------------------------|-------|--------|-------------|--------|--|--|--|--|
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total | | | | |
| Material | \$ 58 | - | - | - | | | | |
| Labour – Internal | 4 | - | - | - | | | | |
| Labour – Contract | - | - | - | - | | | | |
| Engineering | 16 | - | - | - | | | | |
| Other | | | | | | | | |
| Total | \$ 78 | \$ 176 | \$ 398 | \$ 652 | | | | |

Costing Methodology

Table 2 shows the annual expenditures and costs in current dollars for the most recent five year period, as well as the projected expenditure for 2006.

| Table 2 | | | | | | | | |
|--|-------|-------|------|------|-------|-------|--|--|
| Expenditure History and Budget Estimate (000s) | | | | | | | | |
| Year | 2001 | 2002 | 2003 | 2004 | 2005F | 2006B | | |
| Total \$94 \$105 \$41 \$60 \$140 \$78 | | | | | | | | |
| Adjusted Cost ¹ | \$103 | \$114 | \$43 | \$61 | \$140 | - | | |

^{1 2005} dollars.

The process of estimating the budget requirement for communications equipment is based on a historical average. Historical annual expenditures related to upgrading and replacing communications equipment over the most recent five-year period, including the current year, are converted to current-year dollars ("Adjusted Cost") and modified by the GDP Deflator for Canada for the budget year to determine the budget estimate.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitments

INFORMATION SYSTEMS

Project Title: Application Enhancements (Pooled)

Project Cost: \$1,589,000

Project Description

This Information Systems project is necessary to enhance the function of software applications. The Company's software applications are used to support all aspects of business operations including provision of service to customers, ensuring the reliability of the electrical system and compliance with regulatory and financial reporting requirements.

Of the software applications proposed to be enhanced in 2006, some, such as the Customer Service System and the Outage Management System, are custom-developed; others such as the asset management system are vendor-provided.

The application enhancements proposed for 2006 are not inter-dependent. But, they are similar in nature and justification and are therefore pooled for consideration as a single capital project.

Details on proposed expenditures are included in 6.1 2006 Application Enhancements.

Justification

Some of the proposed enhancements included in this project are justified on the basis of improving customer service. Some will result in increased operational efficiencies. Some projects will have a positive impact on both customer service and operational efficiency.

Cost benefit analyses, where appropriate, are provided in 6.1 2006 Application Enhancements.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | | |
|-------------------------------------|---------|---------|-------------|---------|--|--|--|
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total | | | |
| Material | \$200 | - | - | - | | | |
| Labour – Internal | 908 | - | - | - | | | |
| Labour – Contract | - | - | - | - | | | |
| Engineering | 71 | - | - | - | | | |
| Other | 410 | _ | - | - | | | |
| Total | \$1,589 | \$1,330 | \$3,680 | \$6,599 | | | |

Costing Methodology

Table 2 shows the annual expenditures for this project for the most recent five-year period.

| Table 2 | | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| Expenditure History (000s) | | | | | | | | |
| Year 2001 2002 2003 2004 2005F Total \$619 \$726 \$920 \$1,313 \$1,132 | | | | | | | | |

The budget for this project is based on cost estimates for the individual budget items.

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

Future Commitments

Project Title: System Upgrades (Pooled)

Project Cost: \$1,076,000

Project Description

This Information Systems project, formerly known as *Application Environment*, involves necessary upgrades to the computer software underlying the Company's business applications. Most upgrades are required by software vendors to address known software issues or to maintain support provided by the vendors.

For 2006, the project includes upgrades to the Great Plains financial system, the Safety Management System, the TVD Outage Notification System, the Call Centre system and the Transmission Line Design system. The project also includes the renewal of the Microsoft Enterprise Agreement, upgrades to data management processes and the purchase of new software licenses.

The system upgrades proposed for 2006 are not inter-dependent. However, they are similar in nature and justification, and are therefore pooled for consideration as a single capital project.

Details on 2006 proposed expenditures are included in 6.2 2006 System Upgrades.

Justification

This project is justified on the basis of maintaining the current levels of customer service and operational efficiency supported by the software.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | | | |
|-------------------------------------|---------|-------|-------------|---------|--|--|--|
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total | | | |
| Material | \$375 | - | - | - | | | |
| Labour – Internal | 516 | - | - | - | | | |
| Labour – Contract | - | - | - | - | | | |
| Engineering | 16 | - | - | - | | | |
| Other | 169 | - | - | - | | | |
| Total | \$1,076 | \$860 | \$2,840 | \$4,776 | | | |

Costing Methodology

Table 2 shows the annual expenditures and unit costs for this project for the most recent five-year period.

| | | Tak | ole 2 | | | | |
|--|--|-----|-------|--|--|--|--|
| Expenditure History (000s) | | | | | | | |
| Year 2001 2002 2003 2004 2005F Total \$560 \$724 \$721 \$861 \$750 | | | | | | | |

The budget for this project is based on cost estimates for the individual budget items.

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

Future Commitments

With the exception of the provision for the Microsoft Enterprise Agreement, this is not a multi-year project. Under the terms of the Microsoft Enterprise Agreement, Newfoundland Power would be required, upon termination of the arrangement prior to the end of a 3-year term, to pay the full 3-year software licensing fee. Approval is therefore requested for the 3-year expenditure of \$630,000 associated with the Microsoft Enterprise Agreement, which covers the period 2006 through 2008 inclusive.

Project Title: Personal Computer Infrastructure (Pooled)

Project Cost: \$327,000

Project Description

This Information Systems project is necessary for the replacement or upgrade of personal computers ("PCs"), printers and associated assets that have reached the end of their useful life. Newfoundland Power is currently able to achieve a four to six year life cycle with its PCs. In 2006, 77 PC devices will be purchased, which is comprised of 47 desktop computers, 15 laptop computers and 15 mobile devices.

This project also covers the purchase of additional peripheral equipment such as monitors and scanners, and the purchase of 9 printers to replace existing printers that have reached the end of their useful lives.

The individual PC devices are not inter-dependent. However, they are similar in nature and justification, and are therefore pooled for consideration as a single capital project.

Minimum specifications for replacement PCs and peripheral equipment are reviewed annually to ensure the personal computing infrastructure continues to remain effective. Industry best practices, technology trends, and the Company's experience are considered when establishing minimum specifications.

The Company's research and experience indicates that an average of four to six years of useful life is attainable before PCs require replacement. This is achieved through the Company's practice of cascading PCs to employees who do not require the computing power of newer PCs, thereby maximizing the asset life of the PC.

Table 1 outlines the PC additions and retirements for 2004 and 2005, as well as the proposed additions and retirements for 2006.

| Table 1 PC Additions and Retirements 2004 - 2006 | | | | | | | | | |
|--|------|--------|-------|------|--------|-------|------|--------|-------|
| | 2004 | | | 2005 | | | 2006 | | |
| | Add | Retire | Total | Add | Retire | Total | Add | Retire | Total |
| Desktop | 70 | 48 | 512 | 88 | 110 | 490 | 47 | 78 | 459 |
| Laptop | 28 | 33 | 117 | 25 | 20 | 122 | 15 | 4 | 133 |
| Mobile Devices | - | - | - | - | - | - | 15 | _ | 15 |
| Total | 98 | 81 | 629 | 113 | 130 | 612 | 77 | 82 | 607 |

Justification

This project is justified on the basis of the need to replace personal computers and associated equipment that has reached the end of its useful life.

Projected Expenditures

Table 2 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 2 Project Expenditures (000s) | | | | | | | | |
|-------------------------------------|-------|-------|-------------|---------|--|--|--|--|
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total | | | | |
| Material | \$180 | - | - | - | | | | |
| Labour – Internal | 63 | - | - | - | | | | |
| Labour – Contract | - | - | - | - | | | | |
| Engineering | - | - | - | - | | | | |
| Other | | | | | | | | |
| Total | \$327 | \$400 | \$1,250 | \$1,977 | | | | |

Costing Methodology

Table 3 shows the annual expenditures for this project for the most recent five-year period.

| Table 3 | | | | | | |
|--|----------------------------|--|--|--|--|--|
| | Expenditure History (000s) | | | | | |
| Year 2001 2002 2003 2004 2005F Total \$405 \$635 \$518 \$424 \$446 | | | | | | |

The project cost for this project is calculated on the basis of historical expenditures and on cost estimates for the individual budget items. Historical annual expenditures over the most recent three-year period are considered and an approximate unit cost is determined based on historical average prices and a consideration of pricing trends. These unit costs are then multiplied by the quantity of units (i.e. desktop, laptop, printer, etc.) to be purchased. Quantities are forecast by identifying the number of unit replacements resulting from lifecycle retirements and the number of new units required to accommodate new software applications or work methods. Once the unit price estimates and quantities have been determined, the work associated with the procurement and installation of the units is estimated based on experience and historical pricing.

To ensure this project is completed at the lowest possible cost consistent with safe and reliable service, all materials and services for this project will be purchased after examining the competitive bids of prospective suppliers.

Future Commitments

Project Title: Shared Server Infrastructure (Pooled)

Project Cost: \$508,000

Project Description

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

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

The shared server infrastructure requirements for 2006 are not inter-dependent. However, they are similar in nature and justification, and are therefore pooled for consideration as a single capital project.

Further details on shared server infrastructure requirements for 2006 are provided in 6.3 2006 Shared Server Infrastructure.

Justification

This project is justified on the basis of maintaining current levels of customer service and operational efficiencies that are supported by the Company's shared server infrastructure.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | |
|-------------------------------------|-------|-------|-------------|---------|--|
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total | |
| Material | \$266 | - | - | - | |
| Labour – Internal | 182 | - | - | - | |
| Labour – Contract | - | - | - | - | |
| Engineering | - | - | - | - | |
| Other | 60 | - | - | _ | |
| Total | \$508 | \$850 | \$2,500 | \$3,858 | |

Costing Methodology

Table 2 shows the annual expenditures for this project for the most recent five-year period.

| Table 2 | | | | | | |
|--|----------------------------|--|--|--|--|--|
| | Expenditure History (000s) | | | | | |
| Year 2001 2002 2003 2004 2005F Total \$625 \$705 \$1,608 \$699 \$571 | | | | | | |

The budget for this project is based on cost estimates for the individual budget items.

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

Future Commitments

UNFORESEEN ALLOWANCE

Project Title: Allowance for Unforeseen Items (Other)

Project Cost: \$750,000

Project Description

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

While the contingencies for which this budget allowance is intended may be unrelated, it is appropriate that the entire allowance be considered as a single capital budget item.

Justification

This project provides funds for timely service restoration.

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.

Costing Methodology

An allowance of \$750,000 for unforeseen capital expenditures has been included in all of Newfoundland Power's capital budgets in recent years.

To ensure the projects to which the proposed expenditures are applied are completed at the lowest possible cost consistent with safe and reliable service, all material and contract labour will be obtained through competitive tendering.

Future Commitment

GENERAL EXPENSES CAPITAL

Project Title: General Expenses Capitalized (Other)

Project Cost: \$2,800,000

Project Description

General Expenses Capitalized (GEC) are general expenses of Newfoundland Power that are capitalized due to the fact that they are related, directly or indirectly, to the Company's capital projects. GEC includes amounts from two sources: direct charges to GEC and amounts allocated from specific operating accounts.

Justification

Certain of Newfoundland Power's general expenses are related, either directly or indirectly, to the Company's capital program. Expenses are charged to GEC in accordance with guidelines approved by the Board in Order No. P.U. 3 (1995-96).

Costing Methodology (least cost)

In Order No. P.U. 3 (1995-96), the Board approved guidelines to determine the expenses of the Company to be included in GEC. The budget estimate of GEC is determined in accordance with pre-determined percentage allocations to GEC based on the guidelines approved by the Board.

Future Commitment

Newfoundland Power Inc. 2006 Capital Budget Leases

| Lease | Annual Cost | Term |
|----------------------------------|--------------------|---------|
| Production Printers | \$40,000 | 5 Years |
| 1.5 MW Portable Diesel Generator | \$12,000 | 2 Years |

Title: Production Printers

Lease Cost: \$40,000/Year

Project Description

This lease is necessary for the replacement of two high volume printers used to print customer bills, customer letter correspondence, and various other business reports with a printing volume of approximately 350,000 pages per month.

The current lease agreement with IKON Office Solutions costs \$51,000 per year, paid in monthly instalments, and will expire on October 31, 2006. The lease has a five year term which began on October 15th 2001.

Justification

This project is justified on the need to provide customers with printed copies of their bills, energy usage, and any associated correspondence.

Projected Expenditures

The estimated annual cost for the lease of these printers is \$40,000 per year for a five-year term. The lease will end October 31, 2011.

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | | |
|-------------------------------------|------|------|-------------|-------|--|
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total | |
| Material | - | - | | - | |
| Labour – Internal | - | - | - | - | |
| Labour – Contract | - | - | - | - | |
| Engineering | - | - | - | - | |
| Other | \$40 | \$40 | \$120 | \$200 | |
| Total | \$40 | \$40 | \$120 | \$200 | |

Future Commitments

This is multi-year project, with commitments expected for a lease term of 5 years.

Title: 1.5 MW Portable Diesel Generator

Lease Cost: \$12,000/Year

Project Description

This lease is for a 1.5 MW Portable Diesel Generator used for backup power generation. It is currently leased on a month-to-month basis and is located in Trepassey. It is used for standby purposes for emergency and construction backup. This is a portable unit that can be moved to other locations as needed.

Justification

This project is justified on the need to provide electrical service to customers during planned and unplanned outages.

Projected Expenditures

The estimated annual cost for the lease of this generator is \$12,000 per year for a two-year term.

Table 1 provides a breakdown of the proposed expenditures for 2006 and a projection of expenditures through 2010.

| Table 1 Project Expenditures (000s) | | | | |
|-------------------------------------|-------------|-------------|-------------|-------------|
| Cost Category | 2006 | 2007 | 2008 - 2010 | Total |
| Material | - | - | | - |
| Labour – Internal | - | - | - | - |
| Labour – Contract | - | _ | - | - |
| Engineering | - | _ | - | - |
| Other | \$12 | \$12 | - | \$24 |
| Total | \$12 | \$12 | - | \$24 |

Future Commitments

This is multi-year project, with commitments expected for a lease term of 2 years.

Newfoundland Power Inc. 2006 Capital Budget Future Required Expenditures

| Improvement to Property | Estimated Annual Expenditure | Timing | |
|--------------------------------|------------------------------|----------------------------|--|
| Microsoft Enterprise Agreement | \$210,000 | 3 Years: 2006 through 2008 | |

Newfoundland Power Inc. 2006 Capital Budget Rate Base (000s)

| | Historical Data | |
|--------------------------------------|---------------------|---------------------|
| | <u>2003</u> | <u>2004</u> |
| Plant Investment | \$ 1,069,420 | \$ 1,113,199 |
| Deduct: Accumulated Depreciation | 448,245 | 462,946 |
| Contributions in Aid of Construction | 20,300 | 20,495 |
| Future Income Taxes | 988 | 1,501 |
| Weather Normalization Reserve | (10,435) 459,098 | (10,477) 474,465 |
| Add - Contributions Country Homes | 610,322 653 | 638,734 563 |
| Balance - Current Year | 610,975 | 639,297 |
| Balance - Previous Year | 576,639 | 610,975 |
| Average | 593,807 | 625,136 |
| Cash Working Capital Allowance | 4,977 | 5,268 |
| Materials and Supplies | 4,009 | 4,661 |
| Average Deferred Charges | 72,937 | 80,046 |
| Average Rate Base at Year End | \$ 675,730 | \$ 715,111 |

2006 Capital Budget Plan

June 2005



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Appendix A: 2006-2010 Capital Budget Plan

1.0 Introduction

To provide a broad context for the Board's consideration of its 2006 capital budget application, Newfoundland Power's 2006 Capital Budget Plan provides overviews of (i) the Company's capital management practice and how it is reflected in its annual capital budgets, (ii) the 2006 capital budget and (iii) the 5-year capital outlook through 2010.

1.1 The Network of Capital Assets

Newfoundland Power's ability to meet its obligations to provide quality electrical service to its customers is largely dependant upon the quality and condition of its capital plant. The Company has approximately \$1.1 billion invested in capital plant and equipment.

Approximately 75% of Newfoundland Power's historical capital expenditure has been in electrical *network* assets, principally distribution, substation and transmission assets. These network assets are geographically dispersed throughout the Company's service territory and include approximately 260,000 distribution poles; 27,000 transmission poles; 45,000 distribution transformers; 136 substations with almost 4,000 pieces of critical electrical equipment; and approximately 10,000 km of distribution and transmission circuitry.

Newfoundland Power's annual capital budgets reflect the management of a relatively large number of components spread over a broad geography that make up the electrical system by which the Company delivers service to its customers.

1.2 The 2006 Capital Budget Plan

This 2006 Capital Budget Plan (the "Plan") provides a broad overview, with specific examples, of how Newfoundland Power assesses its annual capital requirements, particularly those related to refurbishment of existing assets and those related to existing customers' service requirements.

In addition, the Plan specifically includes an overview of the 2006 capital budget by the definition and categories set out in the Board's guidelines of June 2005.

Finally, the Plan is intended to provide an overview of Newfoundland Power's 2006 capital budget within the context of a 2006 to 2010 5-year capital outlook.

2.0 Capital Budgeting

Newfoundland Power's annual capital budgets reflect the Company's capital management practices. The annual budgets are principally aimed at the prudent refurbishment of existing service assets and the extension of the electricity network to meet increasing service requirements.

2.1 Overview

In creating its annual capital budgets, Newfoundland Power's principal purposes are to prudently (i) maintain the existing assets which are essential to the provision of service to its customers; and (ii) extend the electricity network to meet customers' service requirements.

This Section, 2.0 Capital Budgeting, outlines, with specific examples, how the Company practically achieves these broad purposes in its annual capital budgeting process.

2.2 Capital Management Practice

2.2.1 General Principles

Newfoundland Power must manage its capital assets in a way which results in the lowest possible cost to customers consistent with reliable service.

Conceptually, the Company's approach to capital management of existing assets attempts to balance the maximization of asset lives with the proactive replacement of deteriorated plant. Maximizing asset lives tends to lower overall costs. However, the longer that facilities are in the field and exposed to climatic stresses, the greater the likelihood of failure which often results in customer outages and operating costs. Capital expenditures to replace deteriorated plant typically accounts for 50% to 60% of Newfoundland Power's annual capital budgets.

In addition to maintaining the existing capital assets which provide service to customers, Newfoundland Power must invest capital to meet the new service requirements of its customers. Meeting the requirements principally involves investment in the distribution system necessary to connect customers to the system in a cost effective way. Capital expenditures to serve new customers or increased sales typically account for 25% of Newfoundland Power's annual capital budgets.

2.2.2 Distribution Line Capital Maintenance

One example of Newfoundland Power's capital management practices for existing assets is the maintenance of distribution lines.

Each year, Newfoundland Power performs routine inspections on a portion of its total distribution lines. These inspections yield information for the Company's annual distribution line capital maintenance program. In addition, each year Newfoundland Power will perform detailed engineered performance assessments on its poorest performing distribution lines. These performance assessments often result in capital expenditures targeted at underperforming distribution lines. Finally, in each year, a certain portion of Newfoundland Power's distribution

lines can be expected to require immediate capital investment to effect emergency repairs or prevent imminent failure. This is necessary to ensure the distribution lines' continued operational integrity.

The routine capital maintenance resulting from regular inspections tends to focus on distribution line components on a systematic basis. All distribution lines have like components. The budgeted performance based capital investment in distribution lines, on the other hand, is more geographically local in its character. The immediate capital investment required is broadly predictable based upon history, but not predictable in any systematic or geographic sense.

2.2.3 Customer Driven Distribution Capital Expenditures

The primary example of capital budgeting practice relates to customer driven distribution capital expenditure necessary to serve new customers or to increase service requirements of existing customers. These capital expenditures principally include the cost of distribution line extensions, distribution transformers, service drops (the wire installed between the distribution transformer and the customer meter), and meters.

These capital costs will not, in fact, be uniform. For example, the actual cost of a particular distribution service in the Codroy Valley is unlikely to be the same as one that is part of a St. John's subdivision. However, given the diversity of the Company's overall mix of these assets (both geographical and urban/rural), historical costs, *on average*, tend to be a reasonable basis for estimating expenditures of the same type.

2.3 Capital Budgeting Practice

2.3.1 Distribution Line Capital Maintenance

For the example of distribution line capital maintenance described in 2.2.2 Distribution Line Capital Maintenance above, proposed annual capital expenditures are found in 3 separate Newfoundland Power capital projects.

The estimated capital expenditures for annual distribution capital maintenance are reflected in the *Rebuild Distribution Lines* project (\$3,190,000 in 2006). The estimated capital expenditures to address the poorest performing distribution lines are reflected in the *Distribution Reliability Initiative* project (\$3,114,000 in 2006). The estimated capital expenditures on distribution lines required on an immediate basis are reflected in the *Reconstruction* project (\$2,849,000 in 2006).

The total 2006 capital maintenance expenditure for distribution lines is estimated to be \$9,153,000, or 19% of the 2006 capital budget.

2.3.2 Customer Driven Distribution Capital Expenditures

For the example of customer driven distribution capital costs described in 2.2.3 Customer Driven Distribution Capital Expenditures above, proposed annual capital expenditures are found in 6 separate Newfoundland Power capital projects.

The estimated capital expenditures for distribution line extensions, transformers, services and meters necessary to serve new customers are reflected in *Extensions* (\$6,766,000 in 2006);

Transformers (\$2,659,000 of a total project cost of \$5,540,000 in 2006); Services (\$1,468,000 of a total project cost of \$1,851,000 in 2006); and Meters (\$274,000 of a total project cost of \$1,192,000 in 2006) projects. In addition, the street lighting costs which are associated with expanding the distribution system are found in the Street Lighting project (\$872,000 of a total project cost of \$1,272,000 in 2006). Finally, there are expenditures related to growth in customer sales based upon individually forecast circumstances which are reflected in the Feeder Additions and Upgrades to Accommodate Growth project (\$266,000 in 2006).

The total 2006 capital expenditure to expand the distribution system to meet customers' service requirements are estimated to be \$12,305,000, or 25% of the 2006 capital budget.

2.4 Concluding

Newfoundland Power's capital budgeting practices for distribution line maintenance ensure the prudent maintenance of the existing assets which provide service to its customers by a number of means. It explicitly considers the results of routine inspections; the assessment of actual performance; and the inevitability of a degree of failure of electrical network assets on an annual basis.

Newfoundland Power's budgeting for the necessary distribution system expansion to meet customers' increased service requirements is principally achieved by use of historical actual expenditures to estimate future capital costs. Such a method ensures a degree of both consistency and transparency in the budgetary process.

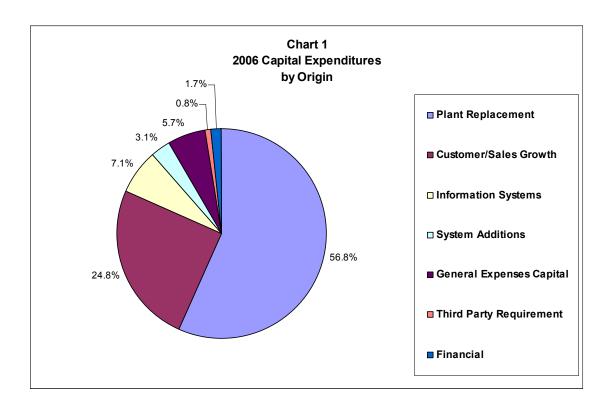
3.0 2006 Capital Budget

Newfoundland Power's capital budget is \$49,258,000. This section of the 2006 Capital Budget Plan provides an overview of the 2006 capital budget by origin (root cause) and asset class. In addition, this section summarizes 2006 capital projects by the various categories set out in the Board's June 2005 capital filing guidelines.

3.1 2006 Capital Budget Overview

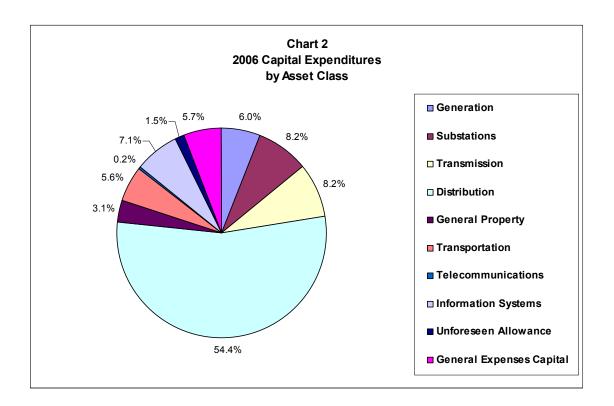
Newfoundland Power's 2006 capital budget contains 32 projects totalling \$49,258,000.

Chart 1 shows the 2006 capital budget by origin, or root cause.



Almost 57% of proposed 2006 capital expenditure is related to the replacement of plant. A further 25% of proposed 2006 capital expenditure is required to meet increases in customer connections and electricity deliveries. These proportions are broadly consistent with recent experience.

Chart 2 shows the 2006 capital budget by asset class.



Distribution capital expenditure accounts for \$26.8 million, or 54% of the 2006 capital budget. Substations and Transmission capital expenditures account for a further \$8.1 million, or 16% of the 2006 capital budget. In total, 70% of the 2006 capital budget relates to electrical *network* assets.

3.2 The Provisional Guidelines

In June 2005, the Board provided guidelines on the definition and categorization of capital expenditures for which a public utility requires prior approval of the Board (the "Provisional Guidelines").

Newfoundland Power's 2006 capital budget application complies with the Provisional Guidelines.

3.2.1 2006 Capital Projects by Definition

Table 1 summarizes Newfoundland Power's proposed 2006 capital projects by definition as set out in the Provisional Guidelines.

Table 1 2006 Capital Projects by Definition

| Definition | No. | (\$000s) | | |
|------------|-----|----------|--|--|
| Pooled | 27 | 43,616 | | |
| Clustered | 1 | 1,829 | | |
| Other | 4 | 3,813 | | |
| Total | 32 | 49,258 | | |

3.2.2 2006 Capital Projects by Classification

Table 2 summarizes Newfoundland Power's proposed 2006 capital projects by classification as set out in the Provisional Guidelines.

Table 2 2006 Capital Projects by Classification

| Classification | No. | (\$000s) | | |
|----------------|-----|----------|--|--|
| Mandatory | - | - | | |
| Normal | 30 | 47,526 | | |
| Justifiable | 2 | 1,732 | | |
| Total | 32 | 49,258 | | |

3.2.3 2006 Capital Projects Costing

Table 3 summarizes Newfoundland Power's proposed 2006 capital projects by costing method (i.e., identified need vs. historical pattern) as set out in the Provisional Guidelines.

Table 3
2006 Capital Projects
Costing Method

| Method | No. | (\$000s) | | |
|--------------------|-----|----------|--|--|
| Identified Need | 19 | 22,886 | | |
| Historical Pattern | 13 | 26,372 | | |
| Total | 32 | 49,258 | | |

3.2.4 2006 Capital Projects Materiality

Table 4 segments Newfoundland Power's proposed 2006 capital projects by materiality as set out in the Provisional Guidelines.

Table 4
2006 Capital Projects
Segmentation by Materiality

| Segment | No. | (\$000s) | | |
|-----------------------|-----|----------|--|--|
| Under \$200,000 | 5 | 557 | | |
| \$200,000 - \$500,000 | 4 | 1,226 | | |
| Over \$500,000 | 23 | 47,475 | | |
| Total | 32 | 49,258 | | |

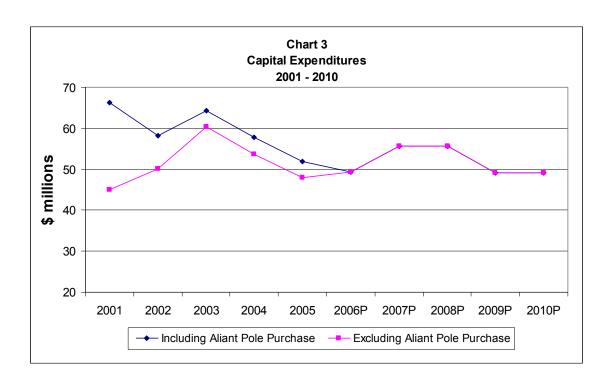
4.0 5-Year Outlook

Newfoundland Power's 5-year capital outlook for 2006 through 2010 is broadly consistent with capital expenditures over the period 2001 through 2005. With the exception of the Rattling Brook hydro plant refurbishment forecast for 2007 and 2008, planned capital expenditures are forecast to be stable on a year-to-year basis through 2010.

4.1 Capital Expenditures: 2001 - 2010

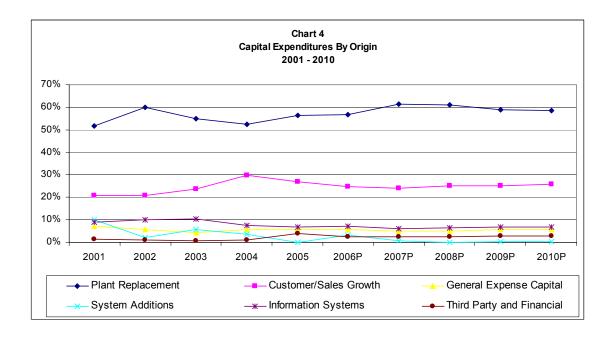
The Company plans to invest approximately \$259 million in plant and equipment during the 2006 through 2010 period. On an annual basis, capital expenditures are expected to average approximately \$51.8 million and range from a low of \$49.1 million in 2009 to a high of \$55.6 million in 2007 and 2008.

Chart 3 shows actual and planned capital expenditures for the period 2001 through 2010 including and excluding the purchase of joint use support structures from Aliant Telecom Inc. over the period 2001 through 2005.



Overall planned capital expenditures over the 5-year period from 2006 through 2010 are expected to be broadly consistent with those in the 5-year period from 2001 through 2005.

Chart 4 shows actual and planned capital expenditures for the period 2001 through 2010 by origin, or root cause. The Aliant Telecom Inc. joint use support structure purchase has been excluded from the analysis.



For the entire 2001 through 2010 period, the replacement of plant has been, and will continue to be, the dominant driver of Newfoundland Power's capital budget, accounting for approximately 59% of total expenditures.

Capital expenditures to meet increases in customer connections and sales will continue to account for approximately 25% of total expenditures.

4.2 2006 – 2010 Capital Expenditure

4.2.1 Overview

Expenditures by origin during the 2006 through 2010 period are also similar to the 2001 through 2005 period. As shown in Chart 5, the Company does not anticipate any significant changes in the pattern of expenditures by origin.

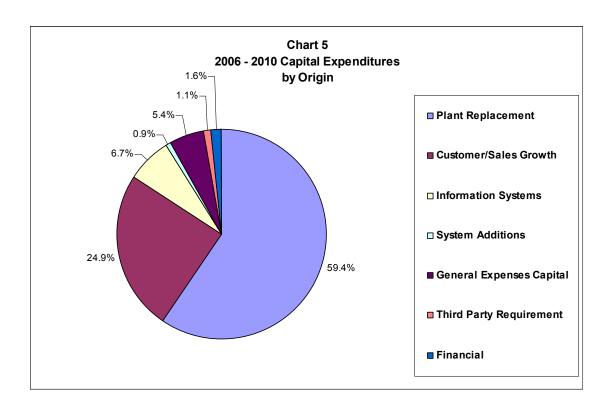
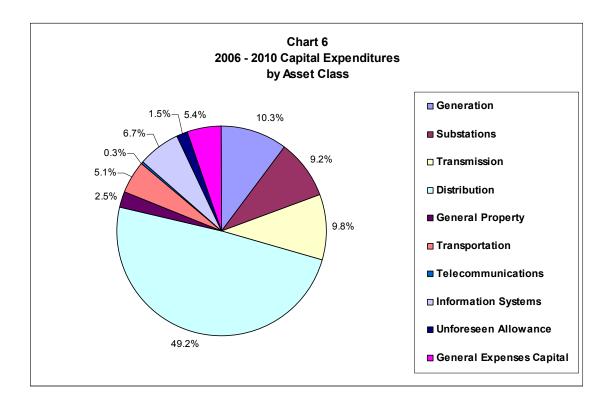


Chart 6, on the following page, shows planned capital expenditures for the period 2006 through 2010 by asset class. Distribution accounts for 49.2% of all planned expenditures over the next five years, followed by Generation (10.3%), Transmission (9.8%) and Substations (9.2%). The remaining six asset classes account for 21.5% of total capital expenditures for the 2006 through 2010 period. The pattern of planned capital expenditures by asset class is consistent with that of the 2001 through 2005 period.

A summary of planned capital expenditures for the 2006 - 2010 period by asset class along with a breakdown by project is contained in Appendix A. Overall, planned expenditures are expected to remain stable in all asset classes with the exception of Generation and Transmission. The following briefly summarizes each asset class.



4.2.2 Generation

The Generation asset class includes capital expenditures related to the replacement of deteriorated plant and equipment at the Company's hydro generating plants and thermal generating stations. These facilities are relatively small when viewed as stand-alone production centers. However, collectively, they displace approximately 675,000 barrels of oil burned at Newfoundland and Labrador Hydro's Holyrood thermal station, contribute to system reliability and, in many cases, provide a source for local backup.

While Generation capital expenditures are expected to average \$5.3 million per year over the 2006 to 2010 period, annual expenditures range from a low of \$2.9 million in 2006 to a high of \$9.1 million in 2008. The increased level of expenditures in 2007 and 2008 are related to the refurbishment of the Rattling Brook plant, the Company's largest hydroelectric plant. This project includes the replacement of the penstock and other key components of the plant. In addition, \$1.8 million has been included in 2006 for the refurbishment of the Petty Harbour plant.

4.2.3 Substations

The Substations asset class includes capital expenditures related to rebuilding substations, replacement and spare substation equipment, feeder remote control, and the addition of transformer capacity. The replacement and spare substation equipment capital expenditures involve the replacement of items such as circuit breakers, reclosers, potential transformers, batteries and other equipment that either fail in service or have reached the end of their useful lives.

The Plan also includes the construction of a new substation in the Humber Valley area in 2007 and the addition of a transformer at the Glendale substation in 2008. The projects in this asset class focus on improved system reliability and operational efficiency, safety, reduced environmental risk associated with oil-filled reclosers, and meeting increases in customer connections and electricity deliveries.

Substation capital expenditures are expected to average \$4.8 million annually over the 2006 through 2010 period.

4.2.4 Transmission

The Transmission asset class includes capital expenditures related to rebuilding transmission lines. The projects include: the replacement of poles, crossarms, and conductor; replacement of pin type and suspension insulators; and improvement of conductor sag and clearances. The projects in this asset class are primarily focused on reliability and safety.

Transmission capital expenditures will increase from \$3.0 million in 2005 to an average of \$5.1 million annually over the 2006 through 2010 period. This increase in expenditures is consistent with the ten-year transmission line strategic plan which will result in substantial investment to upgrade those transmission lines built prior to the adoption of modern engineering standards in the early 1960's.

4.2.5 Distribution

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

Distribution capital expenditures are expected to remain relatively stable at an average of approximately \$25.5 million in the period 2006 to 2010. The decline in capital expenditures in 2007 is the result of the current forecast of new customer connections. During this period, capital expenditures related to the replacement of deteriorated, defective or obsolete plant and equipment are expected to remain stable and similar to the capital expenditures recorded in 2004.

4.2.6 General Property

The General Property asset class includes capital expenditures for the addition or replacement of tools and equipment utilized by line and engineering staff in the day-to-day operation of the Company, as well as the replacement or addition of office furniture and equipment. This asset class includes additions to real property necessary to maintain buildings and facilities and to operate them in an efficient manner. Also included in this asset class is an investment to increase backup diesel generation and implement demand/load control at Company buildings.

General Property capital expenditures are expected to average \$1.3 million annually over the 2006 through 2010 period.

4.2.7 Transportation

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

Transportation capital expenditures are expected to average \$2.6 million annually over the 2006 through 2010 period.

4.2.8 Telecommunications

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

Telecommunications capital expenditures are expected to average \$0.1 million annually over the 2006 through 2010 period.

4.2.9 Information Systems

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

Information Systems capital expenditures are expected to average \$3.4 million annually over the 2006 through 2010 period.

4.2.10 Unforeseen Allowance & General Expenses Capital

The Unforeseen Allowance covers any unforeseen capital expenditures that have not been budgeted elsewhere. The purpose of the account is to permit the Company to act expeditiously to deal with events affecting the electrical system in advance of seeking the approval of the Board.

The Unforeseen Allowance constitutes \$750,000 in each year's capital budget from 2006 through 2010.

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

General Expenses Capital of \$2.8 million is reflected in each year's capital budget from 2006 through 2010.

4.3 5-Year Plan: Risks

While the Company accepts the Board's view of the desirable effects of year to year capital expenditure stability, the nature of the utility obligation to serve will not, in some circumstances, necessarily facilitate such stability. The Plan has identified some risks to such stability in the period 2006 through 2010.

Newfoundland Power has an obligation to serve customers located in its service territory. Therefore, should customer and energy growth vary from forecast, so will the capital expenditures that are sensitive to growth. For example, there are a number of potential mine sites within the Company's service area. Should one of these sites be developed, it may require additional capital expenditures in the order of \$5 million. Due to the speculative nature of these developments the projects have not been included in the Plan.

The Company's Customer Service System ("CSS") is 13 years old. As the replacement cost of a CSS system could be as high as \$15 million, the Company is taking steps to extend the life of CSS through 2010. Accordingly, while the Company has no plans to replace CSS during the 2006 through 2010 period, changing technology and vendor support could conceivably dictate otherwise. Eventual replacement of the CSS will likely be staged over more than 1 year.

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

Overall, with the exception of the Rattling Brook hydro plant refurbishment forecast for 2007 and 2008, planned capital expenditures are forecast to be relatively stable during the 2006 through 2010 period. However, circumstances can change and, as a result, so can priorities and the level of capital expenditures.

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

4.4 5-Year Plan: Summary

Over the next five years, the Company plans to invest approximately \$259 million in plant and equipment. Overall, the planned expenditures are expected to remain relatively stable for all asset classes, and consistent with expenditures incurred during the 2001 through 2005 period.

Approximately 59% of planned expenditures focus on the replacement of deteriorated, defective or obsolete distribution, transmission, generation and substation electrical equipment. Capital expenditures related to customer and sales growth is forecast to remain relatively stable except for the decline in 2007 related to forecast reduced growth in the number of customer connections. The Company does not anticipate any significant changes in the pattern of planned expenditures by origin.

While planned capital expenditures are forecast to be relatively stable during the 2006 through 2010 period, circumstances can change and, as a result the maximum capital budget could approximate \$60 million. Should this occur, it is expected that certain otherwise justifiable projects might be deferred in a way that minimizes the negative impact of deferral on the quality of service.

| Asset Class | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|--------------------------|-------------|-------------|-------------|-------------|-------------|
| Generation | \$2,945 | \$8,272 | \$9,126 | \$3,257 | \$3,106 |
| Substations | 4,040 | 5,560 | 5,014 | 4,595 | 4,680 |
| Transmission | 4,054 | 5,233 | 5,692 | 4,971 | 5,537 |
| Distribution | 26,809 | 25,235 | 25,037 | 25,138 | 25,107 |
| General Property | 1,527 | 1,383 | 1,233 | 1,192 | 1,205 |
| Transportation | 2,755 | 2,703 | 2,325 | 2,857 | 2,555 |
| Telecommunications | 78 | 176 | 150 | 170 | 78 |
| Information Systems | 3,500 | 3,440 | 3,500 | 3,400 | 3,370 |
| Unforeseen Allowance | 750 | 750 | 750 | 750 | 750 |
| General Expenses Capital | 2,800 | 2,800 | 2,800 | 2,800 | 2,800 |
| Total | \$49,258 | \$55,552 | \$55,627 | \$49,130 | \$49,188 |

GENERATION

| Project | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|--|-------------|-------------|-------------|-------------|-------------|
| Hydro Plants – Facility Rehabilitation | \$996 | \$830 | \$775 | \$3,257 | \$3,106 |
| Hydro Plants – Plant Refurbishment Petty Harbour | 1,829 | - | - | - | - |
| Hydro Plants – Plant Refurbishment Rattling Brook | - | 7,442 | 8,351 | - | - |
| Thermal – Port Aux Basques Fuel Tank Replacement | 120 | | | - | - |
| Total - Generation | \$2,945 | \$8,272 | \$9,126 | \$3,257 | \$3,106 |

SUBSTATIONS

| Project | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|---|-------------|-------------|-------------|-------------|-------------|
| Rebuild Substations | \$710 | \$781 | \$592 | \$939 | \$978 |
| Replacement and Standby Substation Equipment | 1,918 | 1,387 | 1,330 | 1,531 | 1,700 |
| Protection and Monitoring Improvements | 423 | 673 | 492 | 1,043 | 835 |
| Additions Due to Load Growth | 210 | 1,413 | 1,850 | 332 | 417 |
| Distribution System Feeder Remote Control | 779 | 750 | 750 | 750 | 750 |
| Rattling Brook – Hydro Plant Refurbishment | - | 556 | - | - | - |
| Total – Substations | \$4,040 | \$5,560 | \$5,014 | \$4,595 | \$4,680 |

TRANSMISSION

| Project | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|----------------------------|-------------|-------------|-------------|-------------|-------------|
| Rebuild Transmission Lines | \$4,054 | \$5,233 | \$5,692 | \$4,971 | \$5,537 |
| Total – Transmission | \$4,054 | \$5,233 | \$5,692 | \$4,971 | \$5,537 |

DISTRIBUTION

| Project | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|--|------------------------------|------------------------------|----------------------------|-----------------------------|---------------------------|
| Extensions | \$6,766 | \$6,658 | \$6,633 | \$6,798 | \$6,984 |
| Meters | 1,192 | 1,091 | 1,325 | 1,079 | 1,074 |
| Services | 1,851 | 1,877 | 1,890 | 1,942 | 1,999 |
| Street Lighting | 1,272 | 1,273 | 1,287 | 1,323 | 1,361 |
| Transformers | 5,540 | 5,400 | 5,400 | 5,400 | 5,400 |
| Reconstruction | 2,849 | 2,700 | 2,822 | 2,932 | 3,044 |
| Trunk Feeders Rebuild Distribution Lines Relocate/Replace Distribution Lines For Third Parties Distribution Reliability Initiative Feeder Additions and Upgrades to Accommodate Growth | 3,190 685 3,114 266 | 3,688 568 1,711 185 | 3,804 591 946 255 | 3,903 612 1,000 65 | 4,003 633 460 65 |
| Interest During Construction | 84 | 84 | 84 | 84 | 84 |
| Total – Distribution | \$26,809 | \$25,235 | \$25,037 | \$25,138 | \$25,107 |

GENERAL PROPERTY

| <u>Project</u> | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|---|-------------|-------------|-------------|-------------|-------------|
| Tools and Equipment | \$587 | \$598 | \$608 | \$620 | \$631 |
| Additions to Real Property | 132 | 335 | 625 | 372 | 574 |
| Stand-By Diesel Generators – Company Buildings | 665 | 450 | - | 200 | - |
| Demand/Load Control – Company Buildings | 143 | - | - | - | - |
| Total – General Property | \$1,527 | \$1,383 | \$1,233 | \$1,192 | \$1,205 |

TRANSPORTATION

| Project | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Purchase Vehicles and Aerial Devices | \$2,755 | \$2,703 | \$2,325 | \$2,857 | \$2,555 |
| Total – Transportation | \$2,755 | \$2,703 | \$2,325 | \$2,857 | \$2,555 |

TELECOMMUNICATIONS

| <u>Project</u> | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|---|-------------|-------------|-------------|-------------|-------------|
| Replace/Upgrade Communications Equipment | \$78 | \$176 | \$150 | \$170 | \$78 |
| Total – Telecommunications | \$78 | \$176 | \$150 | \$170 | \$78 |

INFORMATION SYSTEMS

| Project | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|
| Application Enhancements | \$1,589 | \$1,330 | \$1,160 | \$1,210 | \$1,310 |
| System Upgrades | 1,076 | 860 | 1,040 | 940 | 860 |
| Personal Computer Infrastructure | 327 | 400 | 400 | 450 | 400 |
| Shared Server Infrastructure | 508 | 850 | 900 | 800 | 800 |
| Total – Information Systems | \$3,500 | \$3,440 | \$3,500 | \$3,400 | \$3,370 |

UNFORESEEN ALLOWANCE

| Project | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|
| Allowance for Unforeseen Items | \$750 | \$750 | \$750 | \$750 | \$750 |
| Total – Unforeseen Items | \$750 | \$750 | \$750 | \$750 | \$750 |

GENERAL EXPENSES CAPITAL

| Project | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|
| General Expenses Capitalized | \$2,800 | \$2,800 | \$2,800 | \$2,800 | \$2,800 |
| Total – General Expenses Capital | \$2,800 | \$2,800 | \$2,800 | \$2,800 | \$2,800 |

2005 Capital Expenditure Status Report June 2005



NEWFOUNDLAND POWER INC.

2006 CAPITAL BUDGET APPLICATION

2005 Capital Expenditure Status Report

Explanatory Note

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

Page 1 of the 2005 Capital Expenditure Status Report outlines the forecast variances from budget of the capital expenditures approved by the Board in Order No. P.U. 43 (2004). The detailed tables on pages 2 to 12 provide additional detail on capital expenditures in 2005, and also include information on those capital projects approved for 2002, 2003 and 2004 that were not completed prior to 2005.

Variances of more than 10% of approved expenditure and \$100,000 or greater are explained in the Notes contained in Appendix A, which immediately follows the blue page at the conclusion of the 2005 Capital Expenditure Status Report.

Newfoundland Power Inc. 2006 Capital Budget

2005 Capital Budget Variances (000s)

| | Approved by Order No. <u>P.U. 43 (2004)</u> | Forecast | Variance |
|---|---|-----------------|-----------------|
| Generation | \$3,361 | \$3,363 | \$2 |
| Substations | 3,037 | 2,888 | (149) |
| Transmission | 2,597 | 2,962 | 365 |
| Distribution | 28,635 | 29,965 | 1,330 |
| General Property | 1,016 | 977 | (39) |
| Transportation | 2,642 | 2,242 | (400) |
| Telecommunications | 60 | 140 | 80 |
| Information Systems | 3,243 | 3,319 | 76 |
| Unforeseen Items | 750 | 750 | - |
| General Expenses Capital | 2,800 | 2,800 | |
| Total | <u>\$48,141</u> | <u>\$49,406</u> | <u>\$1,265</u> |
| Projects carried forward from 2002, 2003 & 2004 | | 2,561 | |

| | | | Capital Budget | | | | | | | Actual Expenditures | | | | | | | | | | Forecast | | | | | | | | |
|---------------|---------------|----|----------------|----|-----------|-----------|--------|------------|--------|---------------------|----|----|-------|----|-----------|----|-----------|-----------------|--------|---------------------------|--------|--------------------|--------|-----------------------|--------|----|---------------|--|
| | 2002 A | 2 | 2003 B | 2 | 2004 C | 2005 D | | Total E | | 2002 F | | | | _ | 2004 Н | | TD 005 | Total To Date J | | Remainder of 2005 K | | Total 2005 L | | Overall Total M | | Va | variance N | |
| 2005 Projects | \$ - | \$ | - | \$ | - | \$ | 48,141 | \$ | 48,141 | \$ | - | \$ | - | \$ | - | \$ | 19,934 | \$ | 19,934 | \$ | 29,472 | \$ | 49,406 | \$ | 49,406 | \$ | 1,265 | |
| 2004 Projects | - | | - | | 15,156 | | - | | 15,156 | | - | | - | | 13,394 | | 1,086 | | 14,480 | | 720 | | 1,806 | | 15,200 | | 44 | |
| 2003 Projects | - | | 3,702 | | - | | - | | 3,702 | | - | | 3,427 | | 222 | | 33 | | 3,682 | | 492 | | 525 | | 4,174 | | 472 | |
| 2002 Projects | 2,000 | | - | | - | | - | | 2,000 | | 48 | | 1,353 | | 335 | | 51 | | 1,787 | | 179 | | 230 | | 1,966 | | (34) | |
| Grand Total | \$ 2,000 | \$ | 3,702 | \$ | 15,156 | \$ | 48,141 | \$ | 68,999 | S | 48 | \$ | 4,780 | \$ | 13,951 | \$ | 21,104 | \$ | 39,883 | \$ | 30,863 | \$ | 51,967 | \$ | 70,746 | \$ | 1,747 | |

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

Category: Generation

| | | Capital | Bud | get | | | Actual Ex | pendit | ures | | | Fo | orecast | | | | |
|--|-------------------|-----------------------------|-----|--------------------------------|--------------------------------------|-------------------|-----------------------------|--------|------------------------|------------------------------|--------------------------------------|----|--------------------------------|--------------------------------------|----|----------------------|--------|
| <u>Project</u> | 003 | 2004 B | | 2005 C | Total D | 2003 E | 2004 | | YTD 2005 G | Total o Date H | mainder f 2005 | | Total 2005 | verall Fotal K | Va | riance_ | Notes* |
| | A | В | | C | D | E. | r | | G | н | 1 | | J | K | | L | |
| 2005 Projects Hydro Plants - Facility Rehabilitation Wesleyville Gas Turbine Overhaul Rattling Brook - Hydro Plant Refurbishment | \$ - - - | \$ - - - | \$ | 1,887 1,124 350 3,361 | \$ 1,887 1,124 350 3,361 | \$ - - - | \$ - - - | \$ | 314 16 96 426 | \$ 314 16 96 426 | \$ 1,597 1,086 254 2,937 | \$ | 1,911 1,102 350 3,363 | \$ 1,911 1,102 350 3,363 | \$ | 24 (22) - 2 | |
| 2004 Projects Hydro Plants - Facility Rehabilitation New Chelsea - Hydro Plant Refurbishment | - | 1,222 3,973 5,195 | | - - - | 1,222 3,973 5,195 | - - - | 1,356 4,395 5,751 | | 25 245 270 | 1,381 4,640 6,021 | 153 (7) 146 | | 178 238 416 | 1,534 4,633 6,167 | | 312 660 972 | 1 2 |
| Total - Generation | \$ - | \$ 5,195 | \$ | 3,361 | \$ 8,556 | \$ _ | \$ 5,751 | s | 696 | \$ 6,447 | \$ 3,083 | s | 3,779 | \$ 9,530 | \$ | 974 | |

^{*} See Appendix A for notes containing variance explanations.

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

Category: Substations

| | | | Capital Budget | t | | | | | | | | | | |
|---|--------------------------|--------------------------|--------------------------|---|---|--------------------------|--------------------------|--------------------------|--------------------------------------|---|---|---|---|-------------------------------------|
| <u>Project</u> | 2002 A | 2003 B | 2004 C | 2005 D | Total E | 2002 F | 2003 G | <u>2004</u> н | YTD 2005 I | Total To Date J | Remainder of 2005 K | Total 2005 L | Overall Total M | Variance Notes* |
| 2005 Projects Rebuild Substations Replacement and Standby Substation Equipment Transformer Cooling Refurbishment Protection and Monitoring Improvements Distribution System Feeder Remote Control Feeder Additions Due to Load Growth and Reliability | \$ - - - - - | \$ - - - - - | \$ - - - - - | \$ 351 1,052 174 78 1,114 268 3,037 | \$ 351 1,052 174 78 1,114 268 3,037 | \$ - - - - - | \$ - - - - - | \$ - - - - - | \$ 34 389 8 35 416 48 | \$ 34 389 8 35 416 48 930 | \$ 317 621 166 43 591 220 1,958 | \$ 351 1,010 174 78 1,007 268 2,888 | \$ 351 1,010 174 78 1,007 268 2,888 | \$ (42) - (107) - (149) |
| 2004 Projects Rebuild Substations Replacement and Spare Substation Equipment | - | <u>-</u> | 1,023 1,314 2,337 | <u>-</u> | 1,023 1,314 2,337 | - | - - - | 634 1,189 1,823 | 20 22 42 | 654 1,211 1,865 | 326 47 373 | 346 69 415 | 980 1,258 2,238 | (43) (56) (99) |
| 2003 Projects Reliability and Power Quality Improvements | - | 198 | - | - | 198 | - | 76 | - | 2 | 78 | 99 | 101 | 177 | (21) |
| 2002 Projects Purchase Power Transformer Total - Substations | 2,000 \$ 2,000 | s 198 | \$ 2,337 | \$ 3,037 | 2,000 \$ 7,572 | 48 S 48 | 1,353 \$ 1,429 | 335 \$ 2,158 | \$ 1,025 | 1,787 \$ 4,660 | 179 \$ 2,609 | 230 \$ 3,634 | 1,966 \$ 7,269 | (34) |

^{*} See Appendix A for notes containing variance explanations.

| Column A | Approved Capital Budget for 2002 |
|----------|---|
| Column B | Approved Capital Budget for 2003 |
| Column C | Approved Capital Budget for 2004 |
| | 11 1 0 |
| Column D | Approved Capital Budget for 2005 |
| Column E | Total of Columns A, B ,C and D |
| Column F | Actual Capital Expenditures for 2002 |
| Column G | Actual Capital Expenditures for 2003 |
| Column H | Actual Capital Expenditures for 2004 |
| Column I | YTD Actual Capital Expenditures for 2005 |
| Column J | Total of Columns F, G, H and I |
| Column K | Forecast Capital Expenditures for Remainder of 2005 |
| Column L | Total of Column I and K |
| Column M | Total of Column J and K |
| Column N | Column M less Column E |
| | |

Category: Transmission

| | | | | Capita | get | | Actual Expenditures | | | | | | | | Forecast | | | | | | | | | | |
|---|-----|----|----|--------|-----|-------|---------------------|-------|----|----|----|-----|----|-------------|----------|--------------|----|-------------------|----|---------------|----|-----------------|----|--------|--------|
| <u>Project</u> | 200 |)3 | 2 | 004 | | 2005 | | Total | 20 | 03 | 20 | 004 | | YTD 2005 | | otal Date | | mainder f 2005 | | Total 2005 | | verall Total | Va | riance | Notes* |
| | A | | | В | | С | | D | 1 | E | | F | | G | | Н | | I | | J | | K | | L | |
| 2005 Projects Rebuild Transmission Lines | \$ | - | \$ | - | \$ | 2,597 | \$ | 2,597 | \$ | - | \$ | - | \$ | 462 | \$ | 462 | \$ | 2,500 | \$ | 2,962 | \$ | 2,962 | \$ | 365 | 3 |
| Total - Transmission | \$ | - | \$ | - | \$ | 2,597 | \$ | 2,597 | s | - | \$ | - | \$ | 462 | s | 462 | \$ | 2,500 | \$ | 2,962 | \$ | 2,962 | \$ | 365 | |

^{*} See Appendix A for notes containing variance explanations.

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

Category: Distribution

| | | Capital | Budget | | | Actual Ex | penditures | | | Forecast | | | |
|---|----------|----------|-----------|-----------|----------|-----------|------------|-----------|-----------|-----------|-----------|------------|--------|
| | | | | | | | YTD | Total | Remainder | Total | Overall | | |
| Project | 2003 | 2004 | 2005 | Total | 2003 | 2004 | 2005 | To Date | of 2005 | 2005 | Total | Variance | Notes* |
| | A | В | С | D | E | F | G | Н | I | J | К | L | |
| 2005 Projects | | | | | | | | | | | | | |
| Extensions | \$ - | \$ - | \$ 6,374 | \$ 6,374 | \$ - | \$ - | \$ 2,531 | \$ 2,531 | \$ 4,865 | \$ 7,396 | \$ 7,396 | \$ 1,022 | 4 |
| Meters | - | - | 965 | 965 | - | - | 634 | 634 | 709 | 1,343 | 1,343 | 378 | 5 |
| Services | - | - | 1,895 | 1,895 | - | - | 746 | 746 | 1,379 | 2,125 | 2,125 | 230 | 6 |
| Street Lighting | - | - | 1,254 | 1,254 | - | - | 712 | 712 | 801 | 1,513 | 1,513 | 259 | 7 |
| Transformers | - | - | 5,189 | 5,189 | - | - | 2,906 | 2,906 | 1,833 | 4,739 | 4,739 | (450) | |
| Reconstruction | - | - | 2,825 | 2,825 | - | - | 906 | 906 | 1,852 | 2,758 | 2,758 | (67) | |
| Aliant Pole Purchase | - | - | 4,044 | 4,044 | - | - | 4,044 | 4,044 | - | 4,044 | 4,044 | ` <u>-</u> | |
| Trunk Feeders | | | | | | | | | | | | | |
| Rebuild Distribution Lines | - | - | 4,210 | 4,210 | - | - | 1,270 | 1,270 | 2,935 | 4,205 | 4,205 | (5) | |
| Relocate/Replace Distribution Lines For Third Parties | - | - | 734 | 734 | - | - | 301 | 301 | 397 | 698 | 698 | (36) | |
| Distribution Reliability Initiative | - | - | 872 | 872 | - | - | 380 | 380 | 493 | 873 | 873 | 1 | |
| Feeder Additions and Upgrades to Accommodate Growth | - | - | 173 | 173 | - | - | 107 | 107 | 64 | 171 | 171 | (2) | |
| Interest During Construction | - | - | 100 | 100 | - | - | 29 | 29 | 71 | 100 | 100 | - | |
| | - | - | 28,635 | 28,635 | - | - | 14,566 | 14,566 | 15,399 | 29,965 | 29,965 | 1,330 | |
| 2004 Projects | | | | | | | | | | | | | |
| Rebuild Distribution Lines | - | 4,137 | - | 4,137 | - | 3,160 | 174 | 3,334 | 201 | 375 | 3,535 | (602) | 8 |
| 2003 Projects | | | | | | | | | | | | | |
| Rebuild Distribution Lines | 3,504 | - | - | 3,504 | 3,351 | 222 | 31 | 3,604 | 393 | 424 | 3,997 | 493 | 9 |
| | | | | | | | | | | | | | |
| Total - Distribution | \$ 3,504 | \$ 4,137 | \$ 28,635 | \$ 36,276 | \$ 3,351 | \$ 3,382 | \$ 14,771 | \$ 21,504 | \$ 15,993 | \$ 30,764 | \$ 37,497 | \$ 1,221 | |

^{*} See Appendix A for notes containing variance explanations.

| Column A | Approved Capital Budget for 2003 |
|----------|---|
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| Column E | Actual Capital Expenditures for 2003 |
| Column F | Actual Capital Expenditures for 2004 |
| Column G | YTD Actual Capital Expenditures for 2005 |
| Column H | Total of Columns E, F and G |
| Column I | Forecast Capital Expenditures for Remainder of 2005 |
| Column J | Total of Column G and I |
| Column K | Total of Column H and I |
| Column L | Column K less Column D |
| | |

Category: General Property

| | Capital Budget | | | | | | | | | Actual Ex | pendi | tures | | | | Fo | recast | | | | | |
|-----------------------------------|----------------|----|----|-----|----|-------|----|-------|----|-----------|----------|-------|-------------|-----------------|----|----------------|--------|--------------|-----------------|----|--------|--------|
| <u>Project</u> | 200 | 03 | 2 | 004 | : | 2005 | 1 | Fotal | 2 | 2003 | 2004 | | YTD 2005 | Total o Date | | ainder 2005 | | otal 2005 | verall 'otal | Va | riance | Notes* |
| | A | | | В | | C | | D | | E | F | | G | Н | | I | | J | K | | L | |
| 2005 Projects Tools and Equipment | s | _ | \$ | _ | \$ | 691 | \$ | 691 | \$ | _ | \$ _ | \$ | 141 | \$ 141 | s | 490 | \$ | 631 | \$ 631 | \$ | (60) | |
| Additions to Real Property | | - | | - | | 325 | | 325 | | - | - | | 54 | 54 | | 292 | | 346 | 346 | | 21 | |
| Total - General Property | \$ | | \$ | | \$ | 1,016 | \$ | 1,016 | \$ | | \$ | \$ | 195 | \$ 195 | \$ | 782 | \$ | 977 | \$ 977 | \$ | (39) | |

^{*} See Appendix A for notes containing variance explanations.

| Column A | Approved Capital Budget for 2003 |
|----------|---|
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| Column C | Approved Capital Budget for 2005 |
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| Column E | Actual Capital Expenditures for 2003 |
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| Column H | Total of Columns E, F and G |
| Column I | Forecast Capital Expenditures for Remainder of 2005 |
| Column J | Total of Column G and I |
| Column K | Total of Column H and I |
| Column L | Column K less Column D |
| | |

Category: Transportation

| | Capital Budget | | | | | | | | Actual Ex | pend | itures | | | | Fo | recast | | | | | | |
|---|----------------|---|----|-----------|----|-----------|----|------------|-----------|-----------|---------------|----|------------------|----|----------------------|------------------------|----|--------------------|-----------------------|----|-------------|--------|
| <u>Project</u> | 200 | | | 2004 B | | 2005 C | | Total D | : | 2003 E | 2004 F | | YTD 2005 G | | Total o Date H | mainder f 2005 I | | Fotal 2005 J | Overall Total K | Va | riance L | Notes* |
| 2005 Projects Purchase Vehicles and Aerial Devices | \$ | - | \$ | - | \$ | 2,642 | \$ | 2,642 | \$ | - | \$ - | \$ | 650 | \$ | 650 | \$ 1,592 | \$ | 2,242 | \$ 2,242 | \$ | (400) | 10 |
| 2004 Projects Purchase Vehicles and Aerial Devices | \$ | - | \$ | 3,487 | \$ | - | \$ | 3,487 | \$ | - | \$ 2,660 | \$ | 600 | s | 3,260 | \$ - | \$ | 600 | \$ 3,260 | \$ | (227) | |
| Total - Transportation | \$ | _ | \$ | 3,487 | \$ | 2,642 | s | 6,129 | \$ | - | \$ 2,660 | \$ | 1,250 | \$ | 3,910 | \$ 1,592 | \$ | 2,842 | \$ 5,502 | \$ | (627) | |

^{*} See Appendix A for notes containing variance explanations.

| Column A | Approved Capital Budget for 2003 |
|----------|---|
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| Column J | Total of Column G and I |
| Column K | Total of Column H and I |
| Column L | Column K less Column D |
| | |

Category: Telecommunications

| | | Capital Budget | | | | | | | | | A | Actual Ex | pendit | ures | | | Fo | recast | | | | |
|--|------|----------------|-----|----|----|-----|----|------|----|----|----|-----------|--------|-----------|--------------|----------------|----|-------------|---------------|----|--------|--------|
| Project | 2003 | | 200 | 04 | 2 | 005 | T | otal | 20 | 03 | 2 | 2004 | | TD 005 | otal Date | ainder 2005 | | otal 005 | erall otal | Va | riance | Notes* |
| | A | | В | | | С | | D | 1 | Ξ | | F | | G | Н | I | | J | K | | L | |
| 2005 Projects Replace/Upgrade Communications Equipment | \$ | - | \$ | - | \$ | 60 | \$ | 60 | \$ | - | \$ | - | \$ | 82 | \$ 82 | \$ 58 | \$ | 140 | \$ 140 | \$ | 80 | |
| Total - Telecommunications | \$ | _ | \$ | | \$ | 60 | \$ | 60 | \$ | | \$ | | S | 82 | \$ 82 | \$ 58 | \$ | 140 | \$ 140 | \$ | 80 | |

^{*} See Appendix A for notes containing variance explanations.

| Column A | Approved Capital Budget for 2003 |
|----------|---|
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| Column J | Total of Column G and I |
| Column K | Total of Column H and I |
| Column L | Column K less Column D |

Category: Information Systems

| | Capital Budget | | | | | | | | | Actu | al Ex | pendit | ures | | | | | Fo | recast | | | | | |
|---------------------------------|----------------|------|---|------|---|----|-------|-------------|----------|------|-------|--------|------|-------|----|-------|------|---------|--------|-------|-------------|-----|-------|--------|
| D | | 2002 | | 2004 | | | 2005 | | 2002 | | 200 | | | /TD | | Total | | nainder | | Fotal | verall | * 7 | | ** |
| <u>Project</u> | | 2003 | | 2004 | _ | | 2005 | Total | 2003 | | 2004 | | | 2005 | 10 | Date | - 01 | 2005 | | 2005 | Total | Var | iance | Notes* |
| | | A | | В | | | С | D | E | | F | | | G | | Н | | I | | J | K | | L | |
| 2005 Projects | | | | | | | | | | | | | | | | | | | | | | | | |
| Application Enhancements | \$ | - | | 3 | - | \$ | 1,087 | \$ 1,087 | \$ - | | \$ | - | \$ | 430 | \$ | 430 | \$ | 702 | \$ | 1,132 | \$ 1,132 | \$ | 45 | |
| Application Environment | | - | | | - | | 710 | 710 | - | | | - | | 174 | | 174 | | 576 | | 750 | 750 | | 40 | |
| Customer Systems Replacement | | - | | | - | | 144 | 144 | - | | | - | | 61 | | 61 | | 83 | | 144 | 144 | | - | |
| Network Infrastructure | | - | | | - | | 276 | 276 | - | | | - | | 144 | | 144 | | 132 | | 276 | 276 | | - | |
| Personal Computer Infastructure | | - | | | - | | 455 | 455 | - | | | - | | 221 | | 221 | | 225 | | 446 | 446 | | (9) | |
| Shared Server Infastructure | | - | | | - | | 571 | 571 | - | | | - | | 226 | | 226 | | 345 | | 571 | 571 | | - | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | _ | | | | | | | _ | | | | | | | | | | | | | | |
| Total - Information Systems | \$ | - | | 3 | _ | \$ | 3,243 | \$ 3,243 | \$ - | _ : | \$ | | \$ | 1,256 | \$ | 1,256 | \$ | 2,063 | \$ | 3,319 | \$ 3,319 | \$ | 76 | |

^{*} See Appendix A for notes containing variance explanations.

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

Category: Unforeseen Items

| | | Capital | l Budget | | | Actual Ex | xpenditures | | | Forecast | | | |
|---|------|---------|----------|--------|------|-----------|-------------|------------------|----------------------|---------------|------------------|----------|--------|
| <u>Project</u> | 2003 | 2004 | 2005 | Total | 2003 | 2004 | YTD 2005 | Total To Date | Remainder of 2005 | Total 2005 | Overall Total | Variance | Notes* |
| | A | В | С | D | E | F | G | Н | I | J | K | L | |
| 2005 Projects Allowance for Unforeseen Items | \$ - | \$ - | \$ 750 | \$ 750 | \$ - | \$ - | \$ - | \$ - | \$ 750 | \$ 750 | \$ 750 | \$ - | |
| Total - Unforeseen Items | s - | \$ - | \$ 750 | \$ 750 | \$ - | \$ - | s - | \$ - | \$ 750 | \$ 750 | \$ 750 | \$ - | |

^{*} See Appendix A for notes containing variance explanations.

| Column A | Approved Capital Budget for 2003 |
|----------|---|
| Column B | Approved Capital Budget for 2004 |
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| Column J | Total of Column G and I |
| Column K | Total of Column H and I |
| Column L | Column K less Column D |
| | |

Category: General Expenses Capital

| | Capital Budget | | | | Actual Expenditures | | | | Forecast | | | | |
|--|----------------|-----------|----------|------------|---------------------|-----------|------------------|---------------|----------------------|---------------|-----------------------|---------------|--------|
| <u>Project</u> | 2003 | 2004 B | 2005 | Total D | 2003 E | 2004 F | YTD 2005 G | Total To Date | Remainder of 2005 | Total 2005 | Overall Total K | Variance L | Notes* |
| 2005 Projects Allowance for General Expenses Capital | \$ - | \$ - | \$ 2,800 | | \$ - | \$ - | \$ 1,367 | \$ 1,367 | \$ 1,433 | \$ 2,800 | \$ 2,800 | \$ - | |
| Total - General Expenses Capital | \$ - | \$ - | \$ 2,800 | \$ 2,800 | \$ - | s - | \$ 1,367 | \$ 1,367 | \$ 1,433 | \$ 2,800 | \$ 2,800 | s - | |

^{*} See Appendix A for notes containing variance explanations.

| Column A | Approved Capital Budget for 2003 |
|----------|---|
| Column B | Approved Capital Budget for 2004 |
| Column C | Approved Capital Budget for 2005 |
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| Column J | Total of Column G and I |
| Column K | Total of Column H and I |
| Column L | Column K less Column D |

Generation

1. Hydro Plants - Facility Rehabilitation (2004 Project):

Budget: \$1,222,000 Forecast: \$1,534,000 Variance: \$312,000

The variance is primarily the result of higher than anticipated costs for refurbishment projects at the Pierre's Brook (\$73,000) Topsail (\$215,000) and Tors Cove (\$40,000) hydroelectric plants. The increase in the Pierre's Brook project is related to the increased cost of the replacement of the headgate for the penstock. The increase in the Topsail plant refurbishment project is related to increased cost associated with installing the computerized control system for the generator. The increase in the Tors Cove project is related to an unexpected communications cable replacement and increased cost of governor replacement

In addition, a total of \$49,000 was expended under this project to provide fire and intruder alarm systems at 22 hydro plants.

2. New Chelsea - Hydro Plant Refurbishment (2004 Project):

Budget: \$3,973,000 Forecast: \$4,633,000 Variance: \$660,000

An increase in steel prices for the penstock pipe increased the cost of the project by \$180,000.

During detailed engineering, a number of additional requirements were identified to complete the project. First, it was necessary to engage external expertise to assist with the development of new standards and specifications for the advanced relaying and high voltage switchgear at an additional cost of \$150,000. Unanticipated modifications to the building were necessary to comply with building code requirements at a cost of \$130,000. Additional costs associated with the installation and commissioning of electrical and mechanical equipment totalled \$150,000. The additional project cost, and associated lengthening of the construction schedule, increased interest during construction by \$40,000. This project continues to be the least cost alternative and the net present value analysis has not been materially affected.

Transmission

3. Rebuild Transmission Lines:

Budget: \$2,597,000 Forecast: \$2,962,000 Variance: \$365,000

The variance is the result of additional costs for transmission line relocations for 3rd parties (\$219,000) and emergency replacement of transmission line components to restore power or prevent imminent failure (\$193,000). The relocations for 3rd parties are driven by residential subdivision and commercial developments that were unknown to the Company at the time of the 2005 Capital Budget preparation. Newfoundland Power requires developers to contribute to the cost of these relocations an amount equal to the project cost less depreciation of the existing transmission line assets. Emergency replacements were required to restore service on 102L after a storm damaged the line on March 31, to replace insulators on 353L that were found to be damaged during a routine inspection and to upgrade the steel towers of 140L at the Twillingate causeway crossing to prevent an imminent failure discovered during a routine inspection.

Distribution

4. Extensions:

Budget: \$6,374,000 Forecast: \$7,396,000 Variance: \$1,022,000

The capital expenditure variance for Extensions is the result of higher than forecast customer growth. The 2005 budget was estimated on the basis of 2,461 new customer connections. The current 2005 forecast is based on a revised new customer connection projection of 3,161.

5. *Meters*:

Budget: \$965,000 Forecast: \$1,343,000 Variance: \$378,000

The capital expenditure variance of Meters is due to a greater number of meters requiring replacement than has been experienced historically as a result of Measurement Canada compliance sampling results. In 2005, Newfoundland Power is required to replace 7,563 meters due to the failure of two groups of meters that were purchased and installed in 1993. The increase in meter replacements as a result of compliance sampling is related to a particular manufacturer and model of meter and is also being experienced at other utilities in Canada.

6. Services:

Budget: \$1,895,000 Forecast: \$2,125,000 Variance: \$230,000

The capital expenditure variance for Services is the result of higher than forecast customer growth. The 2005 budget for new Services was estimated on the basis of 2,461 new customer connections. The current 2005 forecast is based on a revised new customer connection projection of 3,161.

7. Street Lighting:

Budget: \$1,254,000 Forecast: \$1,513,000 Variance: \$259,000

The capital expenditure variance for Street Lighting is the result of higher than forecast customer growth. The 2005 budget was estimated on the basis of 2,461 new customer connections. The current 2005 forecast is based on a revised new customer connection projection of 3,161.

Distribution

8. Rebuild Distribution Lines (2004 Project):

Budget: \$4,137,000 Forecast: \$3,535,000 Variance: \$(602,000)

The variance reflects a reduction in work following detailed engineering assessment. It is also partly a result of efforts by the Company to manage overall capital expenditure in 2004 in response to higher than expected distribution work due to customer growth, particularly in St. John's. Items within the Rebuild Distribution Lines project were reduced in size and/or deferred to 2005 to ensure higher priority customer growth projects could be executed in a timely and effective manner.

9. Rebuild Distribution Lines (2003 Project):

Budget: \$3,504,000 Forecast: \$3,997,000 Variance: \$493,000

In 2003 the expenditure on this project was \$316,000 greater than forecast. The project involved the rebuilding of several small deteriorated sections of distribution lines and the replacement of defective or deteriorated distribution components such as insulators, cutouts and transformers. The variance resulted when detailed inspections and assessments conducted prior to construction in 2003 identified more work than was originally forecasted.

Two items in the 2003 project were deferred. These two items were: (i) rebuild a deteriorated section of KBR-08 feeder in St. John's, and (ii) build a single phase tap through Terra Nova Park to connect the community of Charlottetown to GLV-02 feeder (this would allow for the retirement of the undersea cable that serves Charlottetown).

The KBR-08 item was completed in 2004 on budget. The Charlottetown item is planned for completion in 2005. The Charlottetown item will require \$177,000 more than originally budgeted (the total for the item is now estimated at \$424,000) to meet the environmental guidelines and conditions for construction of power lines in a national park.

Transportation

10. Purchase Vehicles and Aerial Devices:

Budget: \$2,642,000 Forecast: \$2,242,000 Variance: (\$400,000)

As a result of the recent early retirement program two heavy duty line trucks will be retired from the fleet and will not be replaced.

A Report on the Asset Rate Base Methodology (filed in compliance with Order No. P.U. 19 (2003))

June 2005



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A. INTRODUCTION

In Order No. P.U. 16 (1998-1999), the Board of Commissioners of Public Utilities for Newfoundland and Labrador (the "Board"), approved the use of the Invested Capital method of calculating the allowed return on rate base. Grant Thornton LLP ("Grant Thornton") noted that the method represents the mathematical relationship between the weighted average cost of capital, average invested capital, and average rate base for a given test year¹.

In Order No. P.U. 19 (2003) (the "2003 GRO"), the Board found that the Asset Rate Base method ("ARBM") should replace the Invested Capital method used to calculate Newfoundland Power's return on rate base. Both methods are simply accounting methodologies applied to convert cost of capital to return on rate base. However, the ARBM is less complicated and has fewer variables as it is simply calculated by applying the weighted average cost of capital to rate base. Both the rate base and weighted average cost of capital are regulated by the Board.

The transition to ARBM began in 2003 with the Company including average deferred charges in the computation of average rate base as required by the 2003 GRO.² Grant Thornton noted that the inclusion of deferred charges in rate base would reduce the ratio of invested capital to rate base and improve the operation of the automatic adjustment formula.³

Including deferred charges in rate base brought the Company much closer to the full implementation of ARBM. However, there remains several reconciling items between rate base and invested capital. As another step toward full implementation of ARBM, the Board ordered the Company to review the remaining reconciling items as identified by Grant Thornton.

This report (i) reviews each of these remaining reconciling items, (ii) assesses the appropriateness of their inclusion in Newfoundland Power's rate base, and (iii) illustrates the impact on revenue requirement of moving to the ARBM.

B. REVIEW OF RECONCILING ITEMS

B.1 The Reconciling Items

In Newfoundland Power's 2003 general rate application (the "2003 GRA"), Grant Thornton provided a reconciliation of average invested capital and average rate base (the "Grant Thornton Reconciliation"). The Grant Thornton Reconciliation for the 2004 test year is set out in Table 1.

² Return 8 of the Annual Report to the Board.

¹ Grant Thornton LLP, October 23, 1998

³ Grant Thornton LLP, Supplementary Evidence, April 4, 2003

Table 1 2004 Test Year Reconciliation of Invested Capital and Rate Base ⁴ (\$000s)

| Average Invested Capital (as per BVP-10) Average Rate Base (as per Exhibit 1) | 700,244 703,102 |
|---|--|
| Difference | (2,858) |
| Reconciliation: | |
| Plant (primarily construction in progress) Corporate income tax deposit Materials and supplies (actual vs. allowance) Working capital (actual vs. allowance) Common equity (book vs. regulated) | 1,674 6,949 773 (20,957) 8,703 |
| | (2,858) |

The actual difference between invested capital and rate base in 2004 was approximately \$8.7 million or approximately \$5.8 million more than the 2004 test year forecast. The reconciliation of 2004 actual invested capital and rate base can be found in Appendix A.

This \$5.8 million difference is principally attributable to 2004 increases in Newfoundland Power's purchased power costs and its impact on working capital calculated on an invested capital basis. This impact is described in section *B.5.2 Balance Sheet Working Capital: Invested Capital* at page 4.

Each of the reconciliation items contained in the Grant Thornton Reconciliation are reviewed in this section. Assessment of the appropriateness of their inclusion in Newfoundland Power's rate base is provided in section *C. ASSESSMENT OF RECONCILING ITEMS* at page 5.

B.2 Plant (primarily construction in progress)

B.2.1 Plant Generally

Plant refers to the Company's investment in those physical assets necessary to deliver service to its customers. Plant is the principal component of rate base and is the starting point for the computation of rate base.⁵

⁴ Newfoundland Power 2003 General Rate Application, Grant Thornton, Supplementary Evidence April 4, 2003, Exhibit II.

⁵ See Returns 3 and 4 of Newfoundland Power's Annual Report to the Board.

B.2.2 Construction in Progress: Invested Capital

The difference in plant as reflected in the Company's invested capital and in its rate base relates primarily to construction work in progress ("CWIP").

Invested capital reflects the cash investment in CWIP as at December 31st. The inclusion of CWIP in the financial statements accords with accepted financial accounting practice. The calculation of rate base, on the other hand, specifically excludes CWIP on the conceptual basis that CWIP is not yet 'used or useful' in the provision of service to customers.

B.2.3 Construction in Progress: Current Regulatory Practice

Current regulatory practice in the utility industry provides for interest charges incurred during construction ("IDC") to be included in rate base and that CWIP be excluded from plant investment in the calculation of rate base. This permits the utility to recover the cost of financing CWIP and is in accordance with sound regulatory practice.

The Company calculates IDC on a monthly basis and includes it in plant investment and in the calculation of rate base in accordance with Order No. P.U. 37 (1981).

B.3 Corporate Income Tax Deposit

In the 2004 test year, Newfoundland Power's financial statements reflected a deposit with the Canada Revenue Agency of approximately \$6.9 million. The income tax deposit was required of Newfoundland Power under the provisions of the *Income Tax Act* so that it could contest outstanding tax reassessments.

The income tax deposit was included in the calculation of regulated invested capital for the 2004 test year. However, it was not included in the calculation of rate base for the 2004 test year.

In June 2005, Newfoundland Power settled the outstanding tax reassessments which related to the income tax deposit. It is expected that the deposit will be refunded to Newfoundland Power in 2005.

B.4 Materials and Supplies (actual vs. allowance)

B.4.1 Materials and Supplies Generally

Materials and supplies represent the inventory kept on hand by an enterprise to meet day-to-day requirements of its business. An enterprise must finance these inventories.

B.4.2 Materials and Supplies: Invested Capital

Invested capital reflects actual materials and supplies inventories as reflected in a Company's financial statements as at December 31st. The amount included in the financial statements is calculated in accordance with accepted financial accounting practice.

B.4.3 Materials and Supplies: Current Regulatory Practice

Current regulatory practice in the utility industry provides for a materials and supplies allowance to be included in rate base. The materials and supplies allowance recognizes, and permits recovery of, the cost of inventories for day-to-day operations.

The Company calculates the allowance by averaging the monthly balance of materials and supplies less an expansion factor. This calculation is the method approved by the Board in Order No. 1 (1974).

B.5 Working Capital (actual vs. allowance)

B.5.1 Working Capital Generally

When there is a lag between when expenses are paid by an enterprise and revenue is collected by the enterprise, the enterprise is required to provide the interim funds to cover expenses. This interim funding requirement is commonly referred to as working capital.

B.5.2 Balance Sheet Working Capital: Invested Capital

Working capital is the difference between current assets and current liabilities as reflected in financial statements. It is only a snapshot of working capital at a specific point in time (e.g. yearend) and is not indicative of (nor intended to be indicative of) a company's ongoing working capital requirement which varies from day-to-day.

The large negative working capital calculated from Newfoundland Power's year-end financial statements primarily reflects the Company's current accounting practices for revenue recognition. At the end of each financial year, the Company's financial statements have reflected the accrual (as a current liability) of all expenses to December 31st, including purchased power from Hydro.⁶ The Company's financial statements have not, however, reflected the accrual (as a current asset) of the revenue due from customers in respect of electricity deliveries to December 31st.

The Company's current accounting practice for revenue recognition essentially ensures that working capital, for invested capital purposes, will be a substantial negative value. If revenue recognition was changed to the accrual basis current assets would increase by more than \$20,000,000 which would significantly impact balance sheet working capital.

⁶ Purchased power from Hydro is Newfoundland Power's largest expense. It represents over 60% of revenue on an annual basis.

Revenue recognition was a central issue in Newfoundland Power's longstanding tax dispute with the Canada Revenue Agency. This dispute was settled in June 2005.

B.5.3 Cash Working Capital Allowance: Current Regulatory Practice

Current regulatory practice in the utility industry provides for a cash working capital allowance ("CWC Allowance") to be included in rate base. This approach essentially recognizes, and permits reasonable recovery of the financing costs of the interim funds provided by the enterprise. A CWC Allowance is typically calculated using a lead/lag study that examines the timing differences between when revenue is collected and when particular expenses are paid.

The Company's method for calculating the CWC Allowance to be included in rate base was approved in Order No. P.U. 37 (1984).

B.6 Common Equity (book vs. regulated)

Book common equity is the shareholders' common equity as reflected in the Company's financial statements.

Regulated common equity is higher than book common equity. This is because regulated common equity includes the cumulative total of retained regulated earnings. Regulated retained earnings, in turn, effectively includes cumulative non-regulated expenses net of income taxes.⁸

The use of regulated common equity in the calculation of Newfoundland Power's return on rate base is essentially a legacy issue. Historically, Newfoundland Power has reported its annual return on equity on the basis of 'regulated' returns which exclude non-regulated expenses. For continuity in reporting regulated returns on common equity, the year-to-year regulated retained earnings reflected the cumulation of non-regulated expenses.

For the 2004 test year, regulated common equity exceeded book common equity by approximately \$8.7 million.

C. ASSESSMENT OF RECONCILING ITEMS

C.1 Policy Perspective

A key perspective on the appropriateness of including the outstanding reconciling items identified on the Grant Thornton Reconciliation in Newfoundland Power's rate base is that of regulatory policy.

Current regulatory and ratemaking processes make specific allowance for three of the five outstanding reconciling items; CWIP, materials and supplies, and working capital. Therefore, no change to the rate base will be required to address these reconciling items under the Asset Rate Base method. However, the method used to calculate each item may need review from time-to-time.

⁸ See Return 19 of the Company's Annual Report to the Board.

The corporate income tax deposit will be refunded in 2005. As it will no longer exist, the appropriateness of including it in Newfoundland Power's rate base is not an issue.

The use of regulated common equity in regulatory and ratemaking processes is essentially a legacy issue for Newfoundland Power. As there appears to be no regulatory policy justification for its continued use, it would be practical to discontinue its use. Discontinuing the use of regulated common equity will have no impact on rate base as it is not currently included in rate base. However, it will have a minor impact on the weighted average cost of capital, reducing it by approximately 0.01%. Schedule 1 of Appendix B compares the *pro forma* effect on the weighted average cost of capital of using regulated common equity vs. book common equity.

C.2 Impact on 2004 Test Year Return

Four items (1) Plant (primarily construction in progress), (2) Corporate income tax deposit, (3) Materials and supplies (actual vs. allowance), and (4) Common equity (book vs. regulated) served to *increase* Newfoundland Power's 2004 test year return by increasing the relative amount of investment upon which Newfoundland Power was permitted a return. In the same manner, working capital (actual vs. allowance) served to *decrease* Newfoundland Power's 2004 test year return. The impact of working capital (actual vs. allowance) was greater than that of the other four items combined.

The net effect of all five reconciling items was to reduce the amount of investment upon which Newfoundland Power was permitted a return by approximately \$2.9 million. To put this in perspective, \$2.9 million dollars is just under $\frac{1}{2}$ of 1% of the 2004 test year rate base.

D IMPACT OF IMPLEMENTATION OF ARBM

To illustrate the impact of a full transition to ARBM, Newfoundland Power conducted a comparative analysis of returns based upon the current method and the ARBM for the pro forma 2004 test year. The analysis is provided in Appendix B and its supporting Schedules.

D.1 Results of Analysis

The results of Newfoundland Power's pro forma 2004 test year analysis of returns are summarized in Table 2.

Table 2
Pro Forma Analysis Results
2004 Test Year

| | Current Method | ARBM | Difference |
|--------------------------------|-----------------------|---------|------------|
| Average Rate Base (\$000s) | 703,102 | 703,102 | |
| Return on Rate Base (\$000s) 9 | 62,646 | 62,998 | 352 |
| Rate of Return on Rate Base | 8.91% | 8.96% | 0.05% |
| Revenue from Rates (\$000s) | 402,926 | 403,371 | 445 |

E. CONCLUSION

Moving to the ARBM will remove the complications in converting the cost of capital to a return on rate base. With the transition to ARBM, there is no regulatory justification to change the way the rate base is calculated to further accommodate reconciling items. Also, after implementing ARBM, the reconciliation of the five items identified in the Grant Thornton Reconciliation will no longer be required.

Pro forma comparative analysis based upon the 2004 test year indicates that full transition to the ARBM would result in:

- (i) an increase in return on rate base of \$352,000 (or approximately ½ of 1% of total return on rate base); and
- (ii) a corresponding increase in revenue requirements of \$445,000 (or approximately $1/10^{th}$ of 1% of total revenue requirement).

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These returns on rate base are before the 2004 rate adjustment for 1992-93 excess earnings of \$198,000. For greater detail see Schedules 2 (Current Methodology) and 3 (ARBM).

Appendix A

Reconciliation of Actual 2004 Invested Capital and Rate Base

2004 Actual Reconciliation of Invested Capital and Rate Base (\$000s)

| Average Invested Capital (as per Return 17) Average Rate Base (As per Return 3) | 706,427 715,111 |
|---|--------------------------------------|
| Difference | 8,684 |
| Reconciliation: | |
| Plant (primarily construction in progress) Corporate income tax deposit Materials and supplies (actual vs. allowance) Working capital (actual vs. allowance) Common equity (book vs. regulated) | 179 6,949 674 (25,539) 9,053 (8,684) |

Appendix B

Impact of a Full Transition to ARBM Pro Forma 2004 Test Year

Analysis Methodology

To illustrate the pro forma impact of a full transition to ARBM, Newfoundland Power conducted a comparative analysis of returns based upon the current method and the ARBM.

The basis of the analysis was Newfoundland Power's 2004 test year upon which current Newfoundland Power rates are based. All data inputs for the analysis was taken from the record before the Board at Newfoundland Power's 2003 GRA adjusted for purchased power costs per P.U. Order No.19 (2004) (Amended).

The analysis methodology included the following 3 steps:

- 1. comparison of 2004 test year weighted average cost of capital ("WACC") based upon regulated common equity with WACC based upon book common equity;
- 2. comparison of 2004 test year rate of return on rate base and return on rate base under the current return methodology with that under the ARBM; and
- 3. comparison of 2004 test year revenue requirements under the current methodology with that under ARBM.

Schedule 1 shows the comparison of the 2004 test year WACC based upon regulated common equity with the *pro forma* WACC based upon book common equity.

Schedule 2 shows the calculation of both the rate of return on rate base and return on rate base (in dollars) for the 2004 test year based upon the current method.

Schedule 3 shows the *pro forma* calculation of both the rate of return on rate base and return on rate base (in dollars) based upon the ARBM.

Schedule 4 shows the comparison of the approved 2004 test year revenue requirements (based upon the current method) with the *pro forma* 2004 test year revenue requirements based upon the ARBM.

Newfoundland Power Inc. Pro Forma Weighted Average Cost of Capital Regulated vs. Book Common Equity 2004 Test Year

Table 1
Weighted Average Cost of Capital
Regulated Common Equity

| | \$000s | % | Cost % | Weighted Cost % |
|------------------|----------------|--------|-----------|--------------------|
| Debt | 378,605 | 54.06 | 8.39 | 4.54 |
| Preferred Equity | 9,709 | 1.39 | 6.31 | 0.09 |
| Common Equity | <u>311,930</u> | 44.55 | 9.75 | <u>4.34</u> |
| Total | 700,244 | 100.00 | | <u>8.97</u> |

Table 2
Weighted Average Cost of Capital
Book Common Equity

| | \$000s | % | Cost % | Weighted Cost % |
|------------------|----------------|---------------|-----------|--------------------|
| Debt | 378,605 | 54.75 | 8.39 | 4.59 |
| Preferred Equity | 9,709 | 1.40 | 6.31 | 0.09 |
| Common Equity | 303,227 | 43.85 | 9.75 | 4.28 |
| Total | <u>691,541</u> | <u>100.00</u> | | <u>8.96</u> |

Newfoundland Power Inc.

Rate of Return on Rate Base Formula Current Methodology 2004 Test Year (000s)

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.);

Newfoundland Power Inc.

Rate of Return on Rate Base Formula Asset Rate Base Method Pro Forma 2004 Test Year (000s)

2004 Pro-forma = \$ 703,102 x 8.96% = \$ 62,998 Adjustment for 1992-93 Excess Earnings (198) 2004 Pro-forma on Rate Base \$ 62,800

Newfoundland Power Inc.

Comparison of 2004 Test Year Pro Forma ARBM vs. Current Return Method (\$000s)

| | Current 2004 Test Year ¹ | 2004 Pro-Forma Based on ARBM | Difference |
|---|---|--|--------------------|
| Revenue From Rates Purchased Power Contribution | \$402,926 <u>251,524</u> <u>151,402</u> | \$403,371 <u>251,524</u> <u>151,847</u> | \$445 ² |
| Other Revenue | 8,593 | 8,593 | |
| Other Expenses Operating Expenses Depreciation Income Tax | 52,434 30,589 15,249 98,272 | 52,434 30,589 <u>15,342</u> <u>98,365</u> | 93 ³ |
| Net Earnings Before Finance Charges | 61,723 | 62,075 | |
| Add Non-Deductible Expenses (Net of Tax) | 725 | 725 | |
| Regulated Return on Rate Base | \$ 62,448 4 | \$62,800 5 | \$352 |

Equity Component of Additional Return $$352 \times 48.77\% = 172 Tax Required for Equity Component $$172 \times 53.85\% = 93 where:

53.85% is equal to (tax rate/1-tax rate) or (.35/.65).

This is the 2004 test year Revenue Requirement adjusted as shown in Schedule B of the Company's filing pursuant to Order No. P.U. 17 (2004).

The increase in revenue equals the increase in return plus the increase in taxes.

This is the tax component associated with the additional return and is calculated as follows:

^{48.77%} is the percentage of equity in the weighted average cost of capital.

This is the 2004 test year return on rate base as shown in Schedule 7 of the filing pursuant to Order No. P.U. 19 (2003).

This is the 2004 pro-forma return on rate base as calculated in Schedule 3.