



*Newfoundland
& Labrador*

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

IN THE MATTER OF THE
2007 CAPITAL BUDGET APPLICATION

FILED BY

NEWFOUNDLAND POWER INC.

**DECISION AND ORDER
OF THE BOARD**

ORDER No. P.U. 30 (2006)

BEFORE:

**Robert Noseworthy
Chair and Chief Executive Officer**

**Darlene Whalen
Vice-Chair**

P. U. 30(2006)

IN THE MATTER OF the *Public Utilities Act*, RSNL 1990, c. P-47 (the “*Act*”);

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 2007 Capital Budget of \$62,166,000;
and
- (b) fixing and determining its average rate base for 2005 in the amount of \$745,446,000.

BEFORE:

Robert Noseworthy
Chair and Chief Executive Officer

Darlene Whalen
Vice-Chair

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1 **I BACKGROUND**

2
3 **1. Current Industry Structure**

4
5
6 Electrical services in the Province of Newfoundland and Labrador are provided by two utilities:
7 Newfoundland and Labrador Hydro Corporation (Hydro), which is a Crown Corporation; and
8 Newfoundland Power Inc. (NP), an investor owned subsidiary of Fortis Inc. Hydro is principally
9 responsible for generation and transmission in the Province, with a relatively small amount of
10 distribution in rural areas. NP operates on the Island portion of the Province and is primarily a
11 distribution utility with some generating capacity.

12
13 Together, Hydro and NP generate, transmit and distribute electricity to approximately 262,947
14 domestic and general service customers. NP's operations on the Island service 227,617
15 customers or 86.5% of all general service and domestic customers. Hydro serves the remaining
16 13.5% or 35,330 customers on the Island and in Labrador, as well as four regulated industrial
17 customers and one non-regulated industrial customer.

18
19
20 **2. The Application**

21
22 In accordance with the provisions of the *Act*, NP filed its 2007 capital budget application (the
23 "Application") with the Board of Commissioners of Public Utilities (the "Board") on April 28,
24 2006. In the Application NP requests that the Board make an Order:

- 25
26 i) approving its 2007 Capital Budget of \$62,166,000; and
27 ii) fixing and determining its average rate base for 2005 in the amount of
28 \$745,446,000.

29
30 The Application, in accordance with historical practice, Board guidelines, and relevant
31 legislation includes a detailed explanation of each proposed expenditure setting out a description,
32 justification, projected expenditures, costing methodology and future commitments, if
33 applicable. Additional studies and reports, including detailed engineering reports, are provided
34 in relation to a number of projects.

35
36 **3. Board Authority**

37
38 i) Legislation

39
40 Section 41 (1) of the *Act* requires a public utility to submit an annual capital budget of proposed
41 improvements or additions to its property to the Board for approval no later than December 15th
42 in each year for the next calendar year. In addition, the utility is also required to include an
43 estimate of contributions toward the cost of improvements or additions to its property, which the
44 utility intends to demand from its customers.

45

1 Section 41 (3) prohibits a utility from proceeding without the prior approval of the Board with
2 the construction, purchase or lease of improvements or additions to its property where (a) the
3 cost of the construction or purchase is in excess of \$50,000; or (b) the cost of the lease is in
4 excess of \$5,000 in a year of the lease.

5
6 Section 78 gives the Board the authority to fix and determine the rate base for the service
7 provided or supplied to the public by the utility and also gives the Board the power to revise the
8 rate base. Section 78 also provides the Board with guidance on the elements that may be
9 included in the rate base.

10
11 Board procedures and process are established by regulation, guideline or rules of procedure
12 established in accordance with this legislation. Capital Budget Guidelines applicable to this
13 Application were established provisionally by the Board in June of 2005.

14
15 ii) Process

16
17 On May 19, 2006 notice of the Application was published in newspapers in the Province inviting
18 participation in the review of the Application or letters of comment. Details of the Application
19 and supporting documentation were posted on the Board's website.

20
21 Subsequent to this notice, the Consumer Advocate, Thomas Johnson, was appointed by
22 Government to participate in this Application. The Consumer Advocate advised the Board of his
23 intention to participate and was a full participant in the matter. No other Notices of Intention to
24 Participate were received by the Board.

25
26 Pursuant to Section 14 (1) of the Board's Regulations, information requests were directed to NP
27 by the Board and the Consumer Advocate. NP responded fully to all of the information requests.

28
29 On July 4, 2006 NP provided a site visit of the Rattling Brook hydroelectric generating plant,
30 which is the subject of significant proposed expenditures.

31
32 A technical conference was held on July 5, 2006 in relation to the proposed Rattling Brook
33 expenditures. While Hydro did not file a Notice of Intention to Participate in the matter, counsel
34 and staff of Hydro attended the technical conference at the request of the Board.

35
36 Based on the documentation filed and in the absence of a request by any party for a hearing the
37 Board determined that a public hearing was not required and the Application would be
38 considered on the basis of the written record.

39
40 On August 8, 2006 the Consumer Advocate filed a written submission with the Board.

41
42 On August 14, 2006 NP filed a written submission with the Board.

1 **II PROPOSED 2007 CAPITAL BUDGET**

2
3 **1. Overview**

4
5 NP's proposed total capital budget for 2007 is \$62,166,000. The proposed expenditures by asset
6 class are as follows:

7
8

<u>Asset Class</u>	<u>Budget (000s)</u>
Generation–Hydro	\$ 19,188
Substations	3,968
Transmission	4,283
Distribution	24,103
General Property	1,310
Transportation	2,206
Telecommunications	101
Information Systems	3,457
Unforeseen Allowance	750
General Expenses Capital	<u>2,800</u>
Total	<u>\$ 62,166</u>

9
10 The proposed 2007 capital budget is significantly higher than amounts approved in recent years.
11 The amount initially approved in 2005 was \$49,258,000 [PU 30(2005)], in 2004-\$48,141,000
12 [PU 43(2004)], and in 2003-\$52,209,000 [PU 35(2003)]. The cause of the larger than usual
13 budget is the amount proposed in relation to Generation-Hydro. The amount proposed for
14 Generation–Hydro in 2006 was \$2,825,000, less than 15% of this year's proposed expenditure in
15 the same category. The reason for the large increase in 2007 is a planned major refurbishment of
16 NP's Rattling Brook hydroelectric generating plant.

17
18 **2. Rattling Brook Hydroelectric Generating Plant**

19
20 NP operates 23 hydroelectric generating plants throughout the island portion of the Province.
21 These plants have a combined normal annual production of 419.6 GWh and are tied in to the
22 island interconnected electrical system. The Rattling Brook hydroelectric generating plant is the
23 largest generating plant operated by NP with normal annual plant production of approximately
24 69.8 GWh of energy, or about 16.6% of NP's total hydroelectric generation.

25
26 The total amount of the proposed expenditures in relation to the Rattling Brook hydroelectric
27 generating plant is \$18,820,000, which includes upgrades to the civil, electrical and mechanical
28 systems of the plant and its substation. In support of these proposed expenditures the
29 Application sets out detailed engineering reports in respect of the significant aspects of the
30 proposed expenditures.

31

1 In addition to the detailed information provided in the Application NP answered comprehensive
2 requests for information from the Board and the Consumer Advocate. NP also arranged a site
3 visit on July 4, 2006, which included a comprehensive tour of the whole facility. The Consumer
4 Advocate, Board staff and the Chair and CEO of the Board participated in this site visit.
5

6 The proposed expenditures in relation to the Rattling Brook plant were also further explained in
7 a technical conference on July 5, 2006. NP made a comprehensive presentation at the technical
8 conference and fully participated in subsequent discussions, answering questions posed by
9 participants, including the Consumer Advocate, Hydro and Board staff. The panel did not
10 participate in the technical conference.
11

12 The Consumer Advocate raised concerns about the amount and timing of the proposed
13 expenditures in relation to the Rattling Brook plant. He concludes in his written submission that
14 NP's application to proceed immediately with the Rattling Brook refurbishment as outlined is
15 not firmly supported. He points out the "relatively modest" amount of monies expended on the
16 Rattling Brook penstock in recent years in the context of the anticipated reduced penstock and
17 surge tank maintenance costs of "only" \$10,000.00 per year. He concludes that NP has not
18 established that it has done all that can reasonably be done to deal with leaks before embarking
19 on the immediate replacement of the penstock. The Consumer Advocate expressed concern that
20 the project is being undertaken at a time when the price of steel is nearly at its highest over the
21 past five years and in the absence of reputable price forecasts for the coming year or two. In
22 relation to NP's stated inability to routinely de-water the penstock the Consumer Advocate notes
23 that the penstock has been de-watered four times since 2000. He suggests that if steps were
24 taken to plug the more significant leaks the chances of those leaks developing into problems
25 would be reduced and the amount of time necessary to plug leaks following a de-watering event
26 would be reduced.
27

28 With respect to the numerous issues raised by the Consumer Advocate NP counters in its written
29 submission that the woodstave portion of the penstock needs to be replaced in 2007 because it is
30 in an advanced and progressing state of deterioration. NP notes the evidence that the inability to
31 routinely de-water the penstock for operational reasons constitutes a continuing and serious
32 operating limitation on the penstock. It notes that for each year that the project is deferred the
33 probability of plant failure increases. NP references the evidence showing that plant failure
34 would result in increased capital costs and increased energy costs and may impede NP's ability
35 to provide least-cost energy to its customers. NP states that the cost of steel at the time does not
36 alter the soundness of either the engineering judgment or economic analysis underlying the
37 decision to replace the penstock.
38

39 The Board is satisfied that NP's proposed capital expenditure to replace the Rattling Brook
40 penstock is necessary at this time and cannot be deferred as suggested by the Consumer
41 Advocate. The 2003 SGE Acres report, which outlines the results of an independent inspection
42 of the surge tanks and penstock, indicated that the woodstave penstock was in poor condition and
43 recommended that it be replaced in the near future. The report also identified several issues
44 associated with the surge tank structure, surge tank and risers. NP confirmed in its response to
45 PUB 3.0 that the condition of the penstock has continued to deteriorate. This fact is also

1 evidenced by recent experience with dewaterings and resulting severe leakage upon re-watering,
2 requiring further repair. (PUB 11.0) There is no evidence that increased maintenance
3 expenditures would enable NP to defer the replacement of the woodstave portion of the penstock
4 for any significant period of time. The evidence clearly shows that the penstock is in an
5 advanced and progressing stage of deterioration. In the Board's view, any further delay will
6 increase the probability of penstock failure, which may result in higher capital costs and loss in
7 plant availability.

8
9 According to the Application the costs associated with the replacement and refurbishment of the
10 penstock and surge tank account for \$13,720,000, or 75%, of the proposed \$18,242,000
11 expenditure for the hydro plant. The replacement of the penstock accounts for \$11,720,000 of
12 this amount. An additional \$1,117,000 is proposed for mechanical upgrades, and \$3,318,000 is
13 proposed to be spent for electrical work at the site. In its response to PUB 9.0 NP identified
14 approximately 93% of the proposed expenditure of \$18,242,000 as being urgent based on the
15 physical condition and age of the plant assets. The remaining 7% is designated for replacement
16 of components not considered urgent by reason of their condition but are required to be replaced
17 because of their interdependence with the work that does require urgent attention in 2007. An
18 additional \$578,000 is proposed to be spent on the related upgrade of the Rattling Brook
19 substation. Based on this information the Board is satisfied that the total project should be
20 approved as proposed.

21
22 The Board will approve NP's proposed capital expenditure of \$18,242,000 for the refurbishment
23 of the Rattling Brook hydroelectric generating plant and the proposed capital expenditure of
24 \$578,000 for the refurbishment of the Rattling Brook substation.

25 26 **3. Total Capital Budget**

27
28 While the proposed expenditures in relation to Generation-Hydro are extraordinary the Board
29 notes that the proposed expenditures in relation to the other asset classes are in line with the
30 levels approved by the Board in recent capital budgets. NP has provided detailed information
31 consistent with recent capital budgets and the Board's Guidelines supporting the proposed
32 expenditures. All requests for information from both the Board and the Consumer Advocate
33 were fully and comprehensively answered.

34
35 The Consumer Advocate states in his written submission that NP has not taken all steps available
36 to smooth year-to-year capital budget plan expenditures. He notes that the capital budget for
37 2007 is close to twenty percent higher than previous and forecast years. He suggests that if the
38 significant generation expenditures are approved additional programs could be deferred beyond
39 2007 in order to mitigate the impact of the significant generation expenditures. Specific
40 reference is made to suspending until 2008 other "preventative capital maintenance programs"
41 such as the Substation Strategic Plan and the Transmission Line Rebuild Strategy. The
42 Consumer Advocate requests that the Board order NP to suspend all non-essential programs until
43 2008 in an effort to reduce the 2007 capital budget to historical levels of approximately \$52
44 million.

45

1 In its closing submission, NP notes its obligation to maintain the electrical system and states that
 2 there is no evidence on the record that there are “non-essential programs” proposed in the 2007
 3 Capital Budget. With specific reference to the Substation Strategic Plan and the Transmission
 4 Line Rebuild Strategy NP states that the first is necessary to improve productivity and the second
 5 to provide safe, reliable electrical service.

6
 7 There is no evidence to support the Consumer Advocate’s claim that NP has not taken all steps
 8 available to smooth year-to-year capital expenditures or that the proposed capital budget contains
 9 any non-essential programs. It is noted that, without the \$18,820,000 proposed for the Rattling
 10 Brook hydro plant and substation refurbishment, the proposed capital budget for remaining
 11 projects is \$43,346,000, significantly less than capital budgets approved by the Board in recent
 12 years. The Board is satisfied that NP’s proposed capital expenditures for 2007 are necessary to
 13 provide safe and reliable service as required by the *Act*.

14
 15 On the basis of the extensive documentation and evidence that was presented by NP in support of
 16 the Application and the additional evidence provided in response to Requests For Information,
 17 the Board finds that the proposed total capital budget for 2007 is prudent and reasonable and
 18 will, therefore, approve the 2007 total capital budget in the amount of \$62,166,000.

19 20 **4. Other issues**

21
 22 In his closing submission the Consumer Advocate raises two additional issues not directly
 23 related to specific items in the capital budget:

- 24
 25 i) NP is doing little to promote demand management and energy conservation; and
 26 ii) The Distribution Reliability Initiative does not adequately incorporate energy
 27 conservation.

28 29 Demand Management and Energy Conservation

30
 31 The Consumer Advocate notes that there is “not a single item in the 2007 Capital Budget”
 32 relating to customer energy efficiency programs despite the fact that NP states in the 2007
 33 Capital Budget Plan that it “incorporates energy efficiency considerations in its capital
 34 management practice”. The Consumer Advocate asks the Board to order that a comprehensive
 35 energy efficiency study be undertaken by an experienced firm to identify cost effective programs
 36 for retail consumers in the Province.

37
 38 In its closing submission NP notes that the Application contains projects that maximize the
 39 efficient use of existing resources, minimize system losses and reduce peak load. It references
 40 the 2005 Demand Side Management Report as detailing its customer-focused conservation and
 41 demand management programs and activities.

42
 43 The issues of conservation and demand side management were raised in the context of NP’s
 44 2003 general rate proceeding. In Order No. P.U. 19(2003) the Board agreed that conservation
 45 and energy efficiency can be considered by the Board in the context of least cost electricity for

1 consumers in the province. The Board concluded that issues related to conservation and demand
2 side management would be most appropriately addressed in a generic proceeding involving both
3 NP and NLH. Since NP's and NLH's last general rate applications a marginal cost study has
4 been completed by NLH and NP is now being billed under a demand energy rate structure.
5 These developments are, in the Board's view, important inputs into the consideration of the
6 benefits and impacts of additional demand management programs.

7
8 As noted in its closing submission NP continues to file annual demand side management (DSM)
9 reports (now referred to as conservation and demand management or CDM) with the Board as
10 required by Order No. P.U. 7(1996-97). In its 2005 DSM report NP noted at pg. 7:

11
12 *“Significant increases in retail electricity rates and public attitudes on energy conservation and*
13 *environmental issues have caused Newfoundland Power to re-examine its current program of*
14 *DSM (now CDM) initiatives. These developments, as well as the change in the structure of*
15 *Newfoundland and Labrador Hydro's wholesale electricity rate, have resulted in an increase in*
16 *both the emphasis and scope of Newfoundland Power's CDM initiatives.*

17
18 *The Company has begun fostering a closer working relationship with Newfoundland and*
19 *Labrador Hydro, and with federal and provincial government departments and agencies, on*
20 *matters involving the promotion of energy efficiency and conservation with customers.*
21 *Increased emphasis on energy advertising through programs such as the Bright Ideas energy*
22 *awareness initiative will provide customers with practical information on how they can reduce*
23 *their energy consumption.”*

24
25 The importance of conservation and energy efficiency to consumers and indeed to the utilities in
26 the context of overall system planning is acknowledged and supported by the Board. However,
27 the Board remains convinced, as stated in Order No. P.U. 19(2003), that it is difficult to “provide
28 specific and meaningful policy direction to the utilities on DSM and conservation issues in the
29 absence of supporting evidence and related impacts on the system overall.” Energy efficiency
30 programs are undertaken by both utilities under the auspices of their customer service function,
31 and the activities and associated costs, as determined from system-wide marginal cost studies
32 and other appropriate inputs, to be recovered from ratepayers are more appropriately dealt with
33 as part of a general rate application or as part of a generic proceeding as contemplated by the
34 Board in previous orders. For this reason the Board is not prepared to direct as part of this
35 capital budget order that a comprehensive energy efficiency study be undertaken as requested by
36 the Consumer Advocate.

37 38 Distribution Reliability Initiative

39
40 NP suspended its Distribution Reliability Initiative for 2007. This initiative is a tool for
41 proposing reliability based projects for upcoming budgets based on analysis of historical
42 reliability data. This initiative identifies the fifteen worst performing feeders and utilizes
43 reliability data and engineering assessments.

44
45 In his closing submission the Consumer Advocate suggests that NP should identify the number
46 of hours of service outages that customers are willing to accept and further that NP should work

1 to understand the correlation between amounts spent on improving reliability and the resulting
2 improvement in reliability. He suggests that, based on the response to CA-44.0, NP appears to
3 be spending money to improve reliability without knowing if customers are content with current
4 levels of reliability and whether they are willing to pay higher rates for improved reliability. The
5 Consumer Advocate recommends that a review be conducted so that the Distribution Reliability
6 Initiative incorporate customer value measures prior to the program being commenced in 2008.
7 NP counters that there is no evidence supporting the Consumer Advocate's assertions that
8 utilities typically over-emphasize the value of reliability to customers. NP states that its
9 approach balances the maximization of asset lives with the proactive replacement of deteriorated
10 or inefficient plant with due regard for customer expectation of reliability and price.

11
12 There is insufficient evidence to support the Consumer Advocate's suggestion that NP appears to
13 be spending money to improve reliability without knowing if customers are content with current
14 levels of reliability and whether they are willing to pay higher rates for improved reliability. The
15 analysis of historical reliability data along with engineering assessments, as used by NP in its
16 Distribution Reliability Initiative, has been supported in the past by the Board as an objective
17 measure, but not the sole measure, of where reliability based projects should be focused. On an
18 ongoing basis the Board also monitors the performance and outage reports for both utilities and
19 reliability statistics such as SAIDI and SAIFI are reported in quarterly reports. This information
20 is used by the Board to track the system performance of the utilities, both with respect to
21 historical reliability measures and in relation to other benchmarks. The Board approves capital
22 projects aimed at improving reliability based on the information and evidence filed in support of
23 the proposed expenditure, which in some cases may include customer complaints concerning
24 outage frequency and duration.

25
26 In addition, the Board understands that the ongoing customer satisfaction surveys undertaken by
27 NP on a quarterly basis provide customers with the opportunity to respond to questions such as
28 the ranking in importance of factors such as price, reliability and customer service. The results
29 of these surveys are reported in the utility's quarterly report to the Board. Should the customer
30 satisfaction level fall to an unacceptable level steps can be taken to make improvements or
31 additional information on reliability expectations and the relationship to rates can be sought. The
32 Board is satisfied that additional work in this area is not required at this time.

33

1 **III. 2005 AVERAGE RATE BASE**

2
3 The following table, taken from Schedule D of the Application, shows the calculation of the
4 actual average rate base for 2005 compared with 2004:
5

	(000's)	
	<u>2004</u>	<u>2005</u>
Plant Investment	\$1,113,199	\$1,148,621
<u>Deduct</u>		
Accumulated Depreciation	462,946	476,937
Contributions in Aid of Construction	20,495	21,192
Future Income Taxes	1,501	1,375
Weather Normalization Reserve	<u>(10,477)</u>	<u>(10,100)</u>
	474,465	489,404
	638,734	659,217
Add Contributions- Country Homes	<u>563</u>	<u>580</u>
Balance – Current Year	639,297	659,797
Balance – Previous Year	<u>610,975</u>	<u>639,297</u>
Average	625,136	649,547
Cash Working Capital Allowance	5,268	5,514
Materials and Supplies	4,661	4,322
Average Deferred Charges	<u>80,046</u>	<u>86,063</u>
Average Rate Base at Year End	<u>\$ 715,111</u>	<u>\$ 745,446</u>

6
7 The actual average rate base for 2005 has increased from 2004 primarily due to an increase in net
8 plant investment resulting from additions during the year, as well as an increase in average
9 deferred charges.

10
11 Grant Thornton, the Board's Financial Consultant, reviewed the calculation of the actual average
12 rate base for 2005 as contained in Volume I, Schedule D of the Application, and concluded that
13 the calculation is accurate and in accordance with previous Board Orders.

14
15 Forecast Deferred Charges for 2006 and 2007

16
17 In compliance with Order No. P.U. 19(2003), NP filed evidence relating to its forecast deferred
18 charges, including pension costs, to be included in the calculation of the forecast average rate
19 base for 2006 and 2007.

20
21 Grant Thornton confirmed that the actual deferred charges for 2005 are higher than forecast in
22 NP's 2005 Report on Rate Base and Deferred Charges. The increase of \$0.687 million is due
23 primarily to the amortization methodology for retiring allowances related to the 2005 Early
24 Retirement Program as approved by Order No. P.U. 49(2004). Other fluctuations result from the
25 normal operation of the weather normalization account, an increase in deferred credit facility
26 issue costs due to the extension of the maturity date of NP's revolving credit line approved by
27 Order No. P.U. 4(2006), and a decrease in unamortized debt discount and issue expense

1 compared to forecast.

2

3 The deferred charges for forecast 2005 and 2006 as presented by NP are as follows:

4

	Actual	(000's)	
	2005	Forecast	Forecast
		2006	2007
Weather Normalization Account	\$10,100	\$ 8,998	\$ 7,872
Deferred Credit Facility Issue Costs	117	116	58
Deferred Retiring Allowances	671	134	-
Unamortized Debt Discount Issue Expense	3,228	3,035	2,842
Unamortized Capital Stock Issue Expense	261	199	137
Deferred Depreciation Expenses	-	5,793	5,793
Deferred Pension Costs	<u>84,999</u>	<u>90,333</u>	<u>96,882</u>
Total Deferred Charges	<u>\$99,376</u>	<u>\$108,608</u>	<u>\$113,584</u>

5 Source: NP 2007 Capital Budget Application,
6 Report on Deferred Charges and Rate Base – Table 1, pg. 1 of 7

7

8 Grant Thornton reviewed the information provided by NP relating to the unamortized debt
9 discount and issue expense and the unamortized capital stock issue expense for continuity and
10 reasonableness and have not noted any discrepancies or unusual items. With reference to the
11 Weather Normalization Account and Deferred Pension Costs Grant Thornton noted that no
12 discrepancies or unusual items were found.

13

14 Pursuant to Section 78 of the *Act*, the Board will approve all of the components of and NP's
15 average rate base for 2005 in the amount of \$745,446,000.

16

17 **IV ORDER**

18

19 **IT IS THEREFORE ORDERED THAT:**

20

- 21 **1. Pursuant to Section 41 of the *Act*, NP's capital purchases and construction projects**
22 **in excess of \$50,000, as set out in Schedule A to this Order, are approved.**
- 23
- 24 **2. Pursuant to Section 41 of the *Act*, the 2007 Capital Budget for improvement and**
25 **additions to NP's property in an amount of \$ 62,166,000 is approved.**
- 26
- 27 **3. Pursuant to Section 78 of the *Act*, the rate base for the year ending December 31,**
28 **2005 is hereby fixed and determined at \$ 745,446,000.**
- 29
- 30 **4. Unless otherwise directed by the Board, NP shall file an annual report to the Board**
31 **on its 2007 capital expenditures by March 1, 2008.**

- 1 **5. Unless otherwise directed by the Board, NP shall provide in conjunction with the**
2 **2008 Capital Budget Application, a status report on the 2007 capital budget**
3 **expenditures showing for each project:**
4
5 **(i) the approved budget for 2007;**
6 **(ii) the expenditures prior to 2007;**
7 **(iii) the 2007 expenditures to the date of the application;**
8 **(iv) the remaining projected expenditures for 2007;**
9 **(v) the variance between the projected total expenditures and the approved**
10 **budget; and**
11 **(vi) an explanation of the variance.**
12
13 **6. NP shall pay all costs and expenses of the Board incurred in connection with the**
14 **Application.**

Dated at St. John's, Newfoundland and Labrador this 29th day of September 2006.

Robert Noseworthy
Chair and Chief Executive Officer

Darlene Whalen, P.Eng.
Vice-Chair

G. Cheryl Blundon,
Board Secretary.

SCHEDULE A

ORDER NO. P. U. 30(2006)

ISSUED: SEPTEMBER 29, 2006

NEWFOUNDLAND POWER INC.

2007 CAPITAL BUDGET APPLICATION

GENERATION - HYDRO

Project Title: Rattling Brook Hydro Plant Refurbishment (Clustered)

Project Cost: \$18,242,000

Project Description

This Generation Hydro project is a major refurbishment of the Company's Rattling Brook Hydroelectric Generating Plant. This refurbishment project will require major upgrades to the civil, electrical and mechanical systems of the plant in 2007. Many components require replacement or refurbishment including the woodstave penstock, surge tank, switchgear, generator controls and protection, governors and main valves.

Details on the proposed expenditures are included in *Volume II Rattling Brook Hydro Plant Refurbishment*.

This is a major plant refurbishment which involves a combination of inter-dependent and related components. This refurbishment will be completed in 2007 and is clustered with the Rattling Brook Substation Refurbishment project to minimize plant downtime and maximize efficiencies.

Justification

The Rattling Brook Hydroelectric Generating Plant is the largest generating plant operated by Newfoundland Power. It was commissioned in 1958 and, with the exception of some upgrades, remains in original condition. The normal annual plant production is approximately 69.8 GWh of energy, or about 16.6 per cent of Newfoundland Power's total hydroelectric generation.

Engineering assessments of the civil, mechanical and electrical systems have revealed a number of deficiencies. In particular, the civil engineering assessment, completed with the assistance of outside experts, has identified the necessity to replace the deteriorated penstock and refurbish the surge tank. Replacing the penstock with a larger diameter penstock will result in direct energy gains of 5.2 GWh using the same amount of water as is used today.

The plant's electrical systems are original equipment and have deteriorated with age. The electrical assessment identified issues with electrical protection, the plant's AC and DC systems, and the distribution and communications systems. Upgrades to these components will improve availability for generation and overall plant reliability.

The mechanical assessment identified that the main valves leak with pressure loss across the valves that is approximately three times more than a modern design butterfly valve. Pressure test results show that the replacement of the main valves will directly result in energy gains of 1 GWh.

A feasibility analysis of projected capital and operating expenditures for the Rattling Brook Hydroelectric Generating Plant has determined the levelized cost of energy from the plant over

the next 50 years to be 2.9 cents per kilowatt-hour, which is significantly less than the cost of replacement energy at Holyrood. Furthermore, this project will supply an additional 6.2 GWh of energy to the Island Interconnected electrical system.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2007 to 2011. Anticipated expenditures relating to Rattling Brook's civil infrastructure are currently planned for 2008. These expenditures will be presented with the 2008 Capital Budget Application.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$15,968	-	-	-
Labour – Internal	370	-	-	-
Labour – Contract	99	-	-	-
Engineering	810	-	-	-
Other	995	-	-	-
Total	\$18,242	\$2,080	-	\$20,322

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

This is not a multi-year project. While expenditures are planned for the future, only the 2007 portion is being presented for approval with the 2007 Capital Budget Application.

Project Title: Facility Rehabilitation (Pooled)

Project Cost: \$946,000

Project Description

This Generation project is necessary for the replacement or rehabilitation of deteriorated plant components that have been identified through routine inspections, operating experience and engineering studies. Work will take place on various dam structures such as the Paddy's Pond Outlet Structure, the Horsechops West dam and the Bay Bulls Big Pond dam. The project includes expenditures necessary to improve the efficiency and reliability of various hydro plants or to replace plant due to in-service failures.

Details on 2007 proposed expenditures are included in *1.1 2007 Facility Rehabilitation*.

The replacement or rehabilitation of deteriorated components at individual 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 and six thermal plants range in age from 106 years old to two years old. These facilities provide energy to the Island interconnected electrical system. Maintaining these generating facilities reduces the need for additional, more expensive, generation. In many cases, these generating facilities provide local generation.

Replacement and rehabilitation projects are identified during ongoing inspections and maintenance activities. These projects are necessary for the continued operation of electric generation facilities in a safe, reliable and environmentally compliant manner.

The Company's hydro generation facilities produce a combined normal annual production of 419.6 GWh. The alternative to maintaining these facilities would be to retire them. Replacing the energy produced by these facilities by increasing production at 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 dam structures, 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 energy.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$803	-	-	-
Labour – Internal	62	-	-	-
Labour – Contract	-	-	-	-
Engineering	38	-	-	-
Other	43	-	-	-
Total	\$946	\$1,858	\$4,723	\$7,527

Costing Methodology

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

Table 2					
Expenditure History					
(000s)					
Year	2002	2003	2004	2005	2006F
Total	\$2,031	\$2,510	\$1,909	\$2,283	\$996

The budget estimate for this project is comprised of engineering estimates for the individual budget items and an assessment of historical expenditures for the remainder.

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

This is not a multi-year project.

SUBSTATIONS

Project Title: Substations Refurbishment and Modernization (Pooled)

Project Cost: \$2,190,000

Project Description

This Substations project is a compilation of five formerly separate projects known as Rebuild Substations, Protection and Monitoring Upgrades, Distribution Feeder Remote Control, Reliability and Power Quality Improvements and Transformer Cooling Refurbishment. This project is necessary for the planned replacement of deteriorated and substandard substation infrastructure, such as bus structures, breakers, potential transformers, protective relaying and support structures, equipment foundations, switches and fencing.

A Substation Strategic Plan, which details the Company’s ten-year strategy and 2007 proposed expenditures, are included in *2.1 Substation Strategic Plan*.

The individual requirements for the replacement of substation infrastructure 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 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 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 – 2011	Total
Material	\$871	-	-	-
Labour – Internal	517	-	-	-
Labour – Contract	93	-	-	-
Engineering	520	-	-	-
Other	189	-	-	-
Total	\$2,190	\$3,865	\$12,316	\$18,371

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)					
	2002	2003	2004	2005	2006F
Rebuild Substations	\$687	\$399	\$634	\$722	\$1,603
Protection and Monitoring Upgrades	116	448	57	80	423
Distribution Feeder Remote Control	1,092	1,165	1,179	1,025	779
Reliability and Power Quality Improvements	95	76	43	101	-
Transformer Cooling Refurbishment	-	-	255	144	-
Total	\$1,990	\$2,088	\$2,168	\$2,072	\$2,805

The Company has 130 substations varying in age from five years to greater than 100 years. 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

This is not a multi-year project.

Project Title: Replacements Due to In-Service Failures (Pooled)

Project Cost: \$1,200,000

Project Description

This Substations project, formerly known as Replacement and Standby Substation Equipment, is necessary to replace substation equipment that is retired due to vandalism, storm damage, lightning strikes, electrical or mechanical failure, corrosion damage, technical obsolescence and failure during maintenance testing. Substation equipment that fails in-service requires immediate attention as it is essential to the integrity and reliability of the electrical supply to customers.

The individual requirements for substation equipment 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 2007 proposed expenditures are included in *2.2 2007 Replacements Due to In-Service Failures*.

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 plant and equipment.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$690	-	-	-
Labour – Internal	215	-	-	-
Labour – Contract	-	-	-	-
Engineering	190	-	-	-
Other	105	-	-	-
Total	\$1,200	\$1,231	\$3920	\$6,351

Costing Methodology

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

Table 2					
Expenditure History					
(000s)					
Year	2002	2003	2004	2005	2006F
Total	\$2,716	\$1,159	\$1,284	\$1,194	\$1,023

The Company has 130 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, 360 voltage regulators, 220 potential transformers, 115 battery banks and 2,500 high voltage switches.

The need to replace equipment is determined on the basis of tests, inspections, in-service and imminent failures and operational history of the equipment. An adequate pool of spare equipment is necessary to enable the Company to quickly respond to in-service failure. The size of the pool 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 for this project is based on engineering cost estimates and an assessment of historical expenditures.

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

This is not a multi-year project.

Project Title: Rattling Brook Substation Refurbishment (Clustered)

Project Cost: \$578,000

Project Description

This substation project is proposed in conjunction with the major refurbishment of the Company's Rattling Brook Hydroelectric Generating Plant. This substation refurbishment project will increase the physical dimensions of the substation and will involve the upgrading of the low voltage bus and associated structures. In addition, a three phase station service transformer will be installed for the Rattling Brook plant.

Details on 2007 proposed expenditures are included in *Volume II Rattling Brook Hydro Plant Refurbishment*.

Justification

The existing substation is wood pole construction. The current 12.5 kV distribution bus has non-standard clearances, materials and hardware. The substation bus does not have adequate space to accommodate the addition of the three phase station service transformer. For these reasons the existing substation must be upgraded to current standards. As well, the substation site is too small to facilitate the installation of a portable substation for transformer maintenance or emergency situations and must be increased.

A feasibility analysis of projected capital and operating expenditure requirements for the complete Rattling Brook Hydroelectric Generating Plant has determined the levelized cost of energy from the plant over the next 50 years to be 2.9 cents per kilowatt-hour, which is significantly less than the cost of replacement energy.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2007. There are no expenditures expected after 2007.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$288	-	-	-
Labour – Internal	89	-	-	-
Labour – Contract	-	-	-	-
Engineering	126	-	-	-
Other	75	-	-	-
Total	\$578	-	-	\$578

Costing Methodology

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

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

This is not a multi-year project.

TRANSMISSION

Project Title: Rebuild Transmission Lines (Pooled)

Project Cost: \$4,283,000

Project Description

This Transmission project involves:

1. The rebuilding of the Company's oldest, most deteriorated transmission lines on a priority basis in accordance with the program outlined in the report *Transmission Line Rebuild Strategy* filed with the 2006 Capital Budget Application (\$2,568,000).

Proposed transmission line rebuilding work will take place on sections of 43L, 110L and 20L. Details of the rebuilds can be found in **3.1 Transmission Line Rebuild**.

2. The replacement of poles, crossarms, conductors, insulators and miscellaneous hardware due to deficiencies identified during inspections and engineering reviews or due to in-service and imminent failures (\$1,565,000).
3. Work associated with the relocation of transmission lines at the request of third parties (\$150,000).

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 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 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$1,430	-	-	-
Labour – Internal	575	-	-	-
Labour – Contract	1,818	-	-	-
Engineering	130	-	-	-
Other	330	-	-	-
Total	\$4,283	\$5,056	\$15,497	\$24,836

Costing Methodology

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

Table 2					
Expenditure History					
(000s)					
Year	2002	2003	2004	2005	2006F
Total	\$3,089	\$4,026	\$2,061	\$2,651	\$4,060

The budget estimates for rebuilding and upgrade projects are based on engineering cost estimates. The budget estimates for replacements and relocation projects are based on an assessment of historical expenditures.

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

This is not a multi-year project.

DISTRIBUTION

Project Title: Extensions (Pooled)

Project Cost: \$6,815,000

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 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$2,199	-	-	-
Labour – Internal	1,630	-	-	-
Labour – Contract	2,109	-	-	-
Engineering	699	-	-	-
Other	178	-	-	-
Total	\$6,815	\$6,772	\$20,417	\$34,004

Costing Methodology

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 2007.

Table 2						
Expenditure History and Unit Cost Projection						
Year	2002	2003	2004	2005	2006F	2007B
Total Exp. (000s)	\$5,717	\$6,586	\$8,406	\$7,962	\$7,830	\$6,815
Adjusted Cost (000s) ¹	\$6,534	\$7,354	\$9,111	\$8,282	\$7,830	-
New Customers	3,485	3,833	4,294	4,149	3,584	3,307
Unit Cost (\$/cust.) ¹	\$1,875	\$1,919	\$2,122	\$1,996	\$2,185	\$2,061

¹ 2006 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, expressed in current-year dollars (“Adjusted Cost”) are 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

This is not a multi-year project.

Project Title: Meters (Pooled)

Project Cost: \$1,100,000

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 2007.

Table 1	
2007 Proposed Meter Acquisition	
Program	Number of Meters
Energy Only Domestic Meters	8,150
Other Energy Only and Demand Meters	1,044

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 \$1,100,000 cost for meters to be purchased in 2007, approximately \$133,000 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 as per the *Metering Strategy* filed with the 2006 Capital Budget Application.

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 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 2				
Projected Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$902	-	-	-
Labour – Internal	154	-	-	-
Labour – Contract	44	-	-	-
Engineering	-	-	-	-
Other	-	-	-	-
Total	\$1,100	\$1,132	\$3,797	\$6,029

Costing Methodology

Table 3 shows the annual expenditures for the most recent five-year period, as well as a projection for 2007.

Table 3							
Expenditure History and Budget Estimate							
Year	2002	2003	2004	2005	2006F	Avg	2007B
<i>Meter Requirements</i>							
New Connections	3,485	3,833	4,294	4,149	3,584	-	3,307
GRO's/CSO's	2,270	1,455	8,544	12,399	13,817	-	2,944
Other	540	1,055	1,064	2,175	2,357	-	2,943
Total	6,295	6,343	13,902	18,723	19,758	-	9,194
<i>Meter Costs</i>							
Actual (000s)	\$674	\$595	\$1,297	\$1,342	\$1,556	-	\$1,100
Adjusted ¹ (000s)	\$755	\$649	\$1,376	\$1,382	\$1,556	-	-
Unit Cost¹	\$120	\$102	\$99	\$74	\$79	\$95	\$120

¹ 2006 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

This is not a multi-year project.

Project Title: Services (Pooled)

Project Cost: \$1,848,000

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 wires 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 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 – 2011	Total
Material	\$556	-	-	-
Labour – Internal	1,025	-	-	-
Labour – Contract	90	-	-	-
Engineering	155	-	-	-
Other	22	-	-	-
Total	\$1,848	\$1,850	\$5,650	\$9,348

Costing Methodology

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 2007.

Table 2						
Expenditure History and Unit Cost Projection						
New Services						
Year	2002	2003	2004	2005	2006F	2007B
Total (000s)	\$1,293	\$1,421	\$1,659	\$1,894	\$1,465	\$1,455
Adjusted Cost (000s) ¹	\$1,479	\$1,591	\$1,804	\$1,974	\$1,465	-
New Customers	3,485	3,833	4,294	4,149	3,584	3,307
Unit Cost (\$/cust.) ¹	\$424	\$415	\$420	\$476	\$409	\$440

¹ 2006 dollars.

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 2007.

Table 3						
Expenditure History and Average Cost Projection						
Replacement Services						
(000s)						
Year	2002	2003	2004	2005	2006F	2007B
Total	\$550	\$568	\$349	\$339	\$384	\$393
Exclusions ¹	211	200	-	-	-	-
Adjusted Cost ²	\$388	\$412	\$380	\$353	\$384	-

¹ Exclusions in the 2002 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.

² 2006 dollars.

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

This is not a multi-year project.

Project Title: Street Lighting (Pooled)

Project Cost: \$1,288,000

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 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 – 2011	Total
Material	\$698	-	-	-
Labour – Internal	459	-	-	-
Labour – Contract	99	-	-	-
Engineering	19	-	-	-
Other	13	-	-	-
Total	\$1,288	\$1,288	\$3,922	\$6,498

Costing Methodology

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 2007.

Table 2						
Expenditure History and Unit Cost Projection						
New Street Lights						
Year	2002	2003	2004	2005	2006F	2007B
Total (000s)	\$839	\$892	\$1,020	\$1,363	\$864	\$861
Exclusions ¹ (000s)	-	-	-	\$380	-	-
Adjusted Cost (000s) ²	\$953	\$985	\$1,095	\$1,018	\$864	-
New Customers	3,485	3,833	4,294	4,149	3,584	3,307
Unit Cost (\$/cust.) ²	\$273	\$257	\$255	\$245	\$241	\$260

¹ Exclusions in 2005 reflect the unusually high quantity of new Street Lights installed for the City of St. John's.

² 2006 dollars.

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, expressed in current-year dollars (“Adjusted Cost”) are 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 2007.

Table 3						
Expenditure History and Average Cost Projection						
Replacement Street Lights						
(000s)						
Year	2002	2003	2004	2005	2006F	2007B
Total	\$360	\$395	\$379	\$489	\$401	\$427
Exclusions ¹	-	-	-	70	-	-
Adjusted Cost ²	\$409	\$436	\$407	\$434	\$401	-

¹ Exclusions in 2005 reflect the Company's program replacement of underground wiring for streetlights in the St. John's area at a cost of \$70,000.

² 2006 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.

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

This is not a multi-year project.

Project Title: Transformers (Pooled)

Project Cost: \$5,728,000

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 provides the breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 – 2011	Total
Material	\$5,728	-	-	-
Labour – Internal	-	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	-	-	-	-
Total	\$5,728	\$5,802	\$17,971	\$29,501

Costing Methodology

Table 2 shows the annual expenditures for the most recent five-year period, as well as an estimate for 2007.

Table 2						
Expenditure History and Budget Estimate						
(000s)						
Year	2002	2003	2004	2005	2006F	2007B
Total	\$5,194	\$5,529	\$5,449	\$4,976	\$5,540	\$5,728
Adjusted Cost ¹	\$5,806	\$5,995	\$5,747	\$5,100	\$5,540	-

¹ 2006 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, expressed in current-year dollars (“Adjusted Cost”) are 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

This is not a multi-year project.

Project Title: Reconstruction (Pooled)

Project Cost: \$3,077,000

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 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 – 2011	Total
Material	\$728	-	-	-
Labour – Internal	1,239	-	-	-
Labour – Contract	694	-	-	-
Engineering	311	-	-	-
Other	105	-	-	-
Total	\$3,077	\$3,155	\$10,038	\$16,270

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 2007.

Table 2						
Expenditure History and Budget Estimate						
(000s)						
Year	2002	2003	2004	2005	2006F	2007B¹
Total	\$2,878	\$2,846	\$2,420	\$2,898	\$2,878	\$3,077
Adjusted Cost ²	\$3,299	\$3,189	\$2,636	\$3,023	\$2,878	-

¹ 2007B amount reflects increased customer base.

² 2006 dollars.

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, expressed in current-year dollars (“Adjusted Cost”) are 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

This is not a multi-year project.

Project Title: Rebuild Distribution Lines (Pooled)

Project Cost: \$3,625,000

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

The work for 2007 includes feeder improvements on 47 of the Company's 303 feeders, as well as the replacement of deteriorated padmount transformers.

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 8,300 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 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$1,750	-	-	-
Labour – Internal	1,468	-	-	-
Labour – Contract	208	-	-	-
Engineering	27	-	-	-
Other	172	-	-	-
Total	\$3,625	\$3,702	\$11,672	\$18,999

Costing Methodology

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

Table 2					
Expenditure History					
(000s)					
Year	2002	2003	2004	2005	2006F
Total	\$3,210	\$3,351	\$3,382	\$3,545	\$3,190

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 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

This is not a multi-year project.

¹ See the 2004 Capital Budget Application, Volume III, Distribution, Appendix 2, Attachment B for further detail on lightning arrestor requirements.

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

³ See the 2004 Capital Budget Application, Volume III, Distribution, Appendix 2, Attachment D for further detail on current limiting fuse requirements.

⁴ 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: \$541,000

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, or (3) requests from customers.

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 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 – 2011	Total
Material	\$190	-	-	-
Labour – Internal	173	-	-	-
Labour – Contract	114	-	-	-
Engineering	55	-	-	-
Other	9	-	-	-
Total	\$541	\$555	\$1,766	\$2,862

Costing Methodology

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

Table 2					
Expenditure History					
(000s)					
Year	2002	2003	2004	2005	2006F
Total	\$390	\$330	\$440	\$630	\$1,640
Adjusted Cost ¹	\$447	\$370	\$479	\$657	\$1,640

¹ 2006 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, expressed in current-year dollars (“Adjusted Cost”) are modified by the GDP Deflator for Canada for the budget year to determine the budget estimate. To ensure consistency from year to year, expenditures related to past extraordinary requirements are excluded from the calculation.

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

This is not a multi-year project.

Project Title: Interest During Construction (Pooled)

Project Cost: \$81,000

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 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 – 2011	Total
Material	-	-	-	-
Labour – Internal	-	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	81	-	-	-
Total	\$81	\$82	\$254	\$417

Cost Methodology

Table 2 shows the annual expenditures for the most recent five-year period, as well as an estimate for 2007. The 2006 forecast amount and the 2007 budget amount are based on the average of the annual expenditures for the period 2002 to 2005.

Table 2					
Expenditure History and Budget Estimate					
(000s)					
Year	2002	2003	2004	2005	2006F
Total	\$80	\$74	\$66	\$73	\$84

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

This is not a multi-year project.

GENERAL PROPERTY

Project Title: Tools and Equipment (Pooled)

Project Cost: \$600,000

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 inter-dependent. 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 (\$170,000)*: 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 (\$380,000)*: 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 employees. The office furniture utilized by these employees deteriorates through normal use and must 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 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$600	-	-	-
Labour – Internal	-	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	-	-	-	-
Total	\$600	\$681	\$1,972	\$3,253

Costing Methodology

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

Table 2					
Expenditure History					
(000s)					
Year	2002	2003	2004	2005	2006F
Total	\$378	\$865	\$570	\$693	\$679

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 is 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

This is not a multi-year project.

Project Title: Additions to Real Property (Pooled)

Project Cost: \$100,000

Project Description

This General Property project is required to ensure the continued safe operation of Company facilities and workplaces. The Company has in excess of 20 office and other buildings. There is an ongoing requirement to upgrade or replace equipment and facilities at these buildings due to failure or normal deterioration. Past expenditures have included such items as emergency roof repairs and correcting major drainage problems.

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

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

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$94	-	-	-
Labour – Internal	6	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	-	-	-	-
Total	\$100	\$227	\$705	\$1,032

Costing Methodology

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	2002	2003	2004	2005	2006F
Total	\$337	\$237	\$336	\$334	\$175
Exclusions	270	157	211	224	-
Adjusted Cost	\$67	\$80	\$125	\$100	\$175

The budget for this project is calculated on the basis of historical data as well as engineering estimates for planned budget items as required. To ensure consistency from year to year, expenditures related to planned additions are excluded from the calculation. There are no planned budget items for 2007.

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

This is not a multi-year project.

Project Title: Energy Efficient HVAC System (Other)

Project Cost: \$610,000

Project Description

This General Property project consists of the replacement of the heating, ventilation and air conditioning system (“HVAC system”) in the basement and on the first floor of the Kenmount Road office building. The replacement HVAC system will be energy efficient.

Details on 2007 proposed expenditures are outlined in *4.1 Kenmount Road Office Building HVAC System Replacement*.

Justification

This project is necessary to address high operating costs associated with the current unit and to provide for better air quality and working conditions for employees.

The Kenmount Road building was built in 1968. The original building consisted of the basement and first floor. In 1979, two additional floors were added.

The HVAC system servicing the bottom two floors was installed during the original construction in 1968 and is 38 years old. The expected life of the system was 25 years. Operational problems have been ongoing for some years. Substandard air conditioning has resulted in employees being exposed to higher temperatures in the summer months and cooler temperatures in the winter months.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011. The replacement of the 1979 vintage HVAC system is scheduled for 2009.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$528	-	-	-
Labour – Internal	20	-	-	-
Labour – Contract	-	-	-	-
Engineering	62	-	-	-
Other	-	-	-	-
Total	\$610	\$0	\$535	\$1,145

Costing Methodology

The budget estimate for this project is comprised of engineering estimates.

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

This is not a multi-year project.

TRANSPORTATION

Project Title: Purchase Vehicles and Aerial Devices (Pooled)

Project Cost: \$2,206,000

Project Description

This Transportation project involves the necessary replacement of heavy fleet, 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 2007.

Table 1 2007 Proposed Vehicle Replacements	
Category	No. of Units
Heavy fleet vehicles ¹	8
Passenger vehicles ²	35
Off-road vehicles ³	6
Total	49

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.

Project Expenditures

Table 2 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

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 vehicles category includes snowmobiles, ATVs and trailers.

Table 2				
Projected Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$2,149	-	-	-
Labour – Internal	48	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	9	-	-	-
Total	\$2,206	\$2,714	\$7,568	\$12,488

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

Table 3					
Expenditure History					
(000s)					
Year	2002	2003	2004	2005	2006F
Total	\$1,609	\$3,429	\$2,660	\$2,838	\$2,755

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 five years of age 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 evaluations, 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.

TELECOMMUNICATIONS

Project Title: Replace/Upgrade Communications Equipment (Pooled)

Project Cost: \$101,000

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.

The Company has approximately 340 pieces of mobile radio equipment in service. Each year approximately 20 units break down and where practical, equipment is repaired and deficiencies rectified. However, where it is not feasible to repair equipment or correct deficiencies, replacement is required.

Newfoundland Power uses the analog cellular telephone system to provide backup SCADA communications to substations and hydro plants. This service is scheduled to be decommissioned by Aliant Mobility in 2007. As a result Newfoundland Power will need to replace the analog cellular modems with digital cellular modems.

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.

The replacement of the analog cellular modems is justified on technical obsolescence and the requirement to provide reliable communications for the remote monitoring and control of key distribution, substation, transmission and generation assets.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$ 64	-	-	-
Labour – Internal	6	-	-	-
Labour – Contract	-	-	-	-
Engineering	20	-	-	-
Other	11	-	-	-
Total	\$ 101	\$ 73	\$ 225	\$ 399

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					
(000s)					
Year	2002	2003	2004	2005	2006F
Total	\$105	\$41	\$150	\$102	\$133
Adjusted Cost ¹	\$118	\$45	\$150	\$105	\$133

¹ 2006 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, expressed in current-year dollars (“Adjusted Cost”) are modified by the GDP Deflator for Canada for the budget year to determine the budget estimate. To ensure consistency from year to year, expenditures related to planned projects 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

This is not a multi-year project.

INFORMATION SYSTEMS

Project Title: **Application Enhancements (Pooled)**

Project Cost: **\$1,281,000**

Project Description

This Information Systems project is necessary to enhance the functionality 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 2007, some, such as the Customer Service System, are custom-developed while others, such as the Safety Management System, are vendor-provided.

The application enhancements proposed for 2007 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 *5.1 2007 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 *5.1 2007 Application Enhancements*.

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	-	-	-	-
Labour – Internal	\$850	-	-	-
Labour – Contract	-	-	-	-
Engineering	191	-	-	-
Other	240	-	-	-
Total	\$1,281	\$1,170	\$2,795	\$5,246

Costing Methodology

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

Table 2					
Expenditure History					
(000s)					
Year	2002	2003	2004	2005	2006F
Total	\$726	\$920	\$1,313	\$1,185	\$1,532

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

This is not a multi-year project.

Project Title: **System Upgrades (Pooled)**

Project Cost: **\$689,000**

Project Description

This Information Systems project 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 2007, the project includes upgrades to the Avantis Asset Management System, Reporting Software, Load Research Software and Customer Service System software. The project also includes Application Monitoring and Availability Improvements and Application Change Control Improvements.

The system upgrades proposed for 2007 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 2007 proposed expenditures are included in *5.2 2007 System Upgrades*.

Justification

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

Projected Expenditures

Table 1 provides a breakdown of the proposed expenditures for 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 – 2011	Total
Material	\$70	-	-	-
Labour – Internal	424	-	-	-
Labour – Contract	-	-	-	-
Engineering	20	-	-	-
Other	175	-	-	-
Total	\$689	\$834	\$2,285	\$3,808

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	2002	2003	2004	2005	2006F
Total	\$724	\$721	\$861	\$779	\$1,075

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

This is not a multi-year project.

Project Title: Personal Computer Infrastructure (Pooled)

Project Cost: \$400,000

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 lives.

In 2007, 80 PCs will be purchased consisting of 57 desktop computers and 23 laptop computers. This project also covers the purchase of additional peripheral equipment such as monitors, scanners, and mobile devices, and the purchase of 9 printers to replace existing printers that have reached the end of their useful lives.

The individual PCs and peripheral equipment 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 remains effective. Industry best practices, technology trends, and the Company’s experience are considered when establishing minimum specifications.

Newfoundland Power is currently able to achieve a four to six year life cycle for its PCs before they 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 2005 and 2006, as well as the proposed additions and retirements for 2007.

Table 1									
PC Additions and Retirements									
2005 – 2007									
	2005			2006			2007		
	Add	Retire	Total	Add	Retire	Total	Add	Retire	Total
Desktop	76	98	490	47	78	459	57	57	459
Laptop	26	20	123	15	4	134	23	23	134
Total	102	118	613	62	82	593	80	80	593

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 2007 and a projection of expenditures through 2011.

Table 2				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 - 2011	Total
Material	\$219	-	-	-
Labour – Internal	81	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	100	-	-	-
Total	\$400	\$406	\$1,260	\$2,066

Costing Methodology

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

Table 3					
Expenditure History					
(000s)					
Year	2002	2003	2004	2005	2006F
Total	\$635	\$518	\$424	\$412	\$314

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

This is not a multi-year project.

Project Title: Shared Server Infrastructure (Pooled)

Project Cost: \$877,000

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 of 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 servers, disks, processors, and memory as well as security upgrades.

The shared server infrastructure requirements for 2007 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 2007 are provided in *5.3 2007 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 2007 and a projection of expenditures through 2011.

Table 1				
Project Expenditures				
(000s)				
Cost Category	2007	2008	2009 – 2011	Total
Material	\$560	-	-	-
Labour – Internal	207	-	-	-
Labour – Contract	-	-	-	-
Engineering	-	-	-	-
Other	110	-	-	-
Total	\$877	\$750	\$2,323	\$3,950

Costing Methodology

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

Table 2					
Expenditure History					
(000s)					
Year	2002	2003	2004	2005	2006F
Total	\$705	\$1,608	\$699	\$593	\$568

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

This is not a multi-year project.

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

This is not a multi-year project.

GENERAL EXPENSES CAPITALIZED

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

This is not a multi-year project.



Newfoundland & Labrador

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