

**Pre-filed Testimony and Exhibits of Philip Hughes
for 2000 Capital Budget hearing**

NEWFOUNDLAND POWER INC.
DIRECT TESTIMONY OF PHILIP HUGHES
AND JAMES SPINNEY

1. INTRODUCTION

My name is Philip Hughes. I am President and Chief Executive Officer of Newfoundland Power. I am also currently the Chairman of the Canadian Electricity Association and the Vice Chairman of the Energy Council of Canada.

My name is James Spinney. I am a Chartered Accountant and Manager, Regulatory Affairs with Newfoundland Power. Regulatory Affairs is responsible for regulatory matters generally, including the customer and energy sales forecast.

Our evidence will provide an overview of Newfoundland Power's application which is before the Board. In addition, we will present evidence on the Company's 2000 customer and energy sales forecast, the rate base and automatic adjustment mechanism, and the Company's financing plans.

More detailed evidence on capital expenditures will be provided by Mr. John Evans, Vice President, Engineering and Energy Supply; Ms. Nora Duke, Vice President, Customer and Corporate Services; and Mr. Allan Skov, Manager, Information Services.

2. CAPITAL EXPENDITURE OVERVIEW

The mandate of Newfoundland Power is to provide reliable customer service at the least possible cost. Appropriate capital expenditures play a central role in the fulfillment of that mandate.

Throughout the 1990s Newfoundland Power has managed its business with the focus of reducing overall costs. This has been reflected in our capital expenditures. Exhibit PGH-1 shows Newfoundland Power's capital expenditures for the period 1990 through 1999.

Until the early 1990s, the Company experienced relatively high levels of customer and sales growth. In practical terms, this resulted in much of the electrical system being renewed to meet load growth before replacement would be required because of deterioration and obsolescence. There has been much less of this in the low growth environment of more recent years. Electrical system components are in the field longer now than in previous decades. This development has two important implications for the Company and its customers.

First, extending the operating life of assets results in lower overall costs. This clearly benefits our customers. Second, the longer that facilities are exposed to stresses of the Newfoundland climate, the higher will be the incidence of system failure. This does not benefit our customers as it reduces service quality and increases costs.

Maintaining the appropriate balance between extending asset life and timely replacement of assets is a managerial challenge for the Company, especially in a climate where service

1 interruptions can have serious consequences. As we all know, power interruptions occur more
2 frequently in cold, stormy conditions than in mild weather conditions.

3
4 During 1999, we undertook initiatives that revealed that some older feeders which had above
5 average failure rates were in very poor condition. This increased capital expenditures in 1999.

6 Over the next few years, replacement of deteriorated plant must become and will become a more
7 prominent component of the Company's capital expenditures.

8
9 Newfoundland Power's approach to plant replacement is a measured one which balances
10 customers' expectations as to cost and service. Plant replacement will be targeted in those areas
11 where failure rates are the highest. Approaching the matter in this way, customers will benefit
12 from both extended asset life and improved service quality.

13 14 **3. 1999 CAPITAL EXPENDITURES** 15

16 As the Board is aware, the Company found it necessary in mid-1999 to make significant changes
17 to its capital program. Early in the year, when we undertook a detailed review of the Company's
18 service reliability performance, it became clear that the poorest performance was being
19 experienced in specific areas of our service territory. The Company decided that focused
20 initiatives were needed to address this problem.

21
22 In June, the Company applied to the Board for approval of certain capital projects designed to
23 improve reliability on those feeders identified as having the worst problems, most of which are

1 well known to the Board. Feeders on the Cape Shore, in the Old Perlican area and in Riverhead,
2 St. Mary's Bay, among others, were or are in the process of being substantially rebuilt.

3
4 Overall, the Company is currently forecasting 1999 capital expenditures to be \$42 million or \$2.1
5 million more than the \$39.9 million approved by the Board in Order No. P.U. 6 (1999-2000) in
6 June of this year. While the overall expenditure is the result of numerous changes, four specific
7 items are noteworthy.

8
9 \$625,000 of the increase is associated with the Petty Harbour Penstock which required a greater
10 degree of replacement than originally thought. This work was necessary for safety reasons. In
11 July 1999, we experienced a failure on a part of the penstock not planned to be replaced. The
12 failure threatened to wash out an adjacent road. The \$625,000 expenditure was necessary to
13 replace the failed section. We had initially expected the scope and cost of the Petty Harbour
14 Penstock work to be substantially less than is currently forecast. However, the project still will
15 be completed at a lower overall cost than the alternative relocation and replacement proposal.

16
17 The decision to purchase additional computer servers for backup purposes for \$340,000 in 1999
18 is largely based upon timing. These expenditures were approved by the Board for 1999 but
19 subsequently deferred as part of the June revisions to 1999 capital expenditures. Year 2000
20 contingency planning and product availability indicated that acquisition of the servers prior to
21 year-end was more advantageous to our customers.

1 Another source of increases relates to feeder reliability expenditures on the Avalon peninsula.
2 After this work was approved, design changes to feeders serving the Cape Shore and St. Mary's
3 Bay were necessary primarily to improve the ability of these lines to withstand severe loading
4 conditions. In addition, a greater number of rotten crossarms on poles were encountered on the
5 St. Mary's Bay feeder than originally anticipated. Improving construction standards and
6 replacing the severely deteriorated crossarms were necessary to improve reliability for our
7 customers served by these lines. The increase in cost related to these matters alone is \$363,000.
8
9 Finally, the number of new customer connections in 1999 will be approximately 9 per cent over
10 the forecast presented at the 1998 General Rate Proceeding. This increase in new connections
11 has increased the necessary Company investment in distribution assets over the course of the
12 year.

13 14 **4. 2000 CAPITAL EXPENDITURES** 15

16 The primary focus of the 2000 capital budget is the refurbishment of our aging electrical system.
17

18 The 2000 capital budget is \$41.8 million, of which \$2.8 million is overhead which is capitalized
19 (General Expenses Capitalized). The 2000 capital budget is approximately the same as the
20 current forecast of 1999 capital spending of \$42 million.
21

22 Since Newfoundland Power is predominantly a distribution utility, the largest portion of our
23 capital budget in any year is typically spent on distribution assets. The Distribution capital

1 budget for 2000 reflects this, and also reflects the efforts the Company is focusing on problem
2 feeders and on renewing the electrical system.

3
4 Exhibit PGH-2 shows a breakdown of the budgeted capital expenditures for 2000 according to
5 their fundamental origin. Over \$25 million or 61 per cent of the budget is focused on the
6 necessary refurbishment of the existing electrical system. Mr. Evans will provide more detail on
7 these initiatives in his testimony.

8
9 In addition to ensuring the continuity of electrical service, Newfoundland Power also strives to
10 continually improve the level of customer service and the overall productivity of the Company's
11 operations. Our customer satisfaction surveys show that the number of our customers who are
12 satisfied with overall service has increased from 71 per cent in 1996 to 91 per cent for the 3rd
13 Quarter of this year.

14
15 While making continual improvements in the quality of customer service, the Company also
16 continues to reduce operating costs per customer, which suggests our productivity is also
17 improving. Customer service and productivity are important to the Company and its customers.
18 Our customers will continue to expect and Newfoundland Power will continue to provide
19 efficient, flexible customer service. At the same time, our customers expect, and the *Electrical*
20 *Power Control Act, 1994* requires, that we provide service as efficiently as possible, in order that
21 customers' electricity rates remain as low as possible.

1 If we are to continue to succeed in this regard, it is necessary that we achieve greater efficiencies
2 in our operations. Customer service delivery must continue to improve and our costs must
3 continue to be kept under control.

4
5 One of the primary contributors to the achievement of these goals is our ongoing investment in
6 information technology. These investments allow us to continue to reduce our costs and improve
7 the quality of our customer service at the same time.

8
9 Ms. Duke will discuss how the Company has benefited from these investments, and Mr. Skov
10 will provide details on the proposed 2000 expenditures.

11 12 **5. 2000 CUSTOMER AND ENERGY SALES FORECAST**

13
14 The customer and energy sales forecast is used to develop the Company's estimates of capital
15 expenditures associated with growth in the number of customers and in energy sales. As shown
16 in Exhibit PGH-2, such expenditures constitute \$5.5 million or 13% of the 2000 capital budget.

17
18 The economic projections used in preparing the 2000 customer and energy sales forecast were
19 provided by the Conference Board of Canada dated July 27, 1999.

20
21 Exhibit JDS-1 shows the customer and energy sales forecast for 2000.

1 Residential customer growth is largely a result of housing starts which are forecast to be 1,627
2 units in 2000. The number of Residential customers is forecast to grow by 0.9 per cent in 2000.
3 The forecast housing starts for 2000 is relatively low by historical standards. By comparison, for
4 the 5 years from 1993 to 1998 actual housing starts averaged 1,827 units and for the 10 years
5 from 1989 to 1998 they averaged 2,343 units.

6
7 Residential electricity consumption is a function of the major end uses in the home, such as,
8 space heating, water heating, lighting, and other major appliances. In addition, changes in the
9 cost of electricity and income have an impact on electricity consumption. The average use of
10 energy is forecast to increase by 0.3 per cent in 2000.

11
12 The combined impact of increased numbers of customers and increased average use will
13 contribute to a 1.0 per cent increase in residential energy sales volumes in 2000.

14
15 The number of General Service customers is forecast to grow by 1.0 per cent while General
16 Service energy sales volumes are forecast to grow by 1.5 per cent in 2000. This is primarily the
17 result of growth in provincial service sector gross domestic product of 2.1 per cent.

18
19 The number of street and area lighting customers is forecast to grow by 0.6 per cent while energy
20 sales volumes to these customers will decrease by 0.9 per cent. The decrease in energy sales is
21 attributed to the conversion of mercury vapor lights to high pressure sodium.

1 When you combine Residential, General Service, and Street and Area Lighting, the number of
2 customers is forecast to grow by 0.9 per cent in 2000 while energy sales volumes are forecast to
3 grow by 1.2 per cent.

4

6. RATE BASE AND INVESTED CAPITAL

Changes to Rate Base

Rate base is principally comprised of the Company's fixed assets and forms the basis of regulation of Newfoundland Power's returns.

Schedule G (1st Revision) to the Application shows the increase in average rate base from 1997 through forecast 2000. The forecast average rate base for 2000 is \$513 million. Changes to the Company's rate base are principally the result of two factors – capital expenditures and depreciation. Capital expenditures increase the rate base. Depreciation expense decreases the rate base. When annual capital expenditures exceed annual depreciation, the rate base increases.

The relationship between annual capital expenditure and rate base is direct and is shown in Exhibit JDS-2. Each year annual capital expenditure is added to plant investment. As shown in Schedule G (1st Revision), plant investment is the starting point for the calculation of rate base.

Each year, the Company's capital expenditures are considered and approved by the Board. Each year, the annual depreciation expense is calculated using the composite rates approved by the Board in Order No. P.U. 7 (1996-97).

Changes to Invested Capital

Invested capital is the amount invested in the Company as reflected on the Company's balance sheet. Invested capital will increase to the extent that the Company's capital expenditures (net of salvage and customer contributions) exceeds annual depreciation.

Changes in deferred charges also affect invested capital. Exhibit JDS-3 provides a detailed breakdown of the Company's deferred charges for the years 1997 through 2000. Deferred charges are costs which have been incurred but are expected to be recovered through future revenue. The largest deferred charge for the Company is related to pension costs and represents timing differences between the funding and expensing of these costs. Other examples of deferred charges are unamortized debt expenses, capital stock issuance expenses and deferred regulatory expenses.

Deferred charges are increasing from 1997 through 2000 for two reasons: first, deferred regulatory expenses were introduced as a deferred charge in 1998; and second, annual timing differences associated with pensions continue to be significant. Deferred regulatory expenses represent third party expenses from the 1998 General Rate Proceeding which were ordered to be expensed over three years in Order No. P.U. 36 (1998-99). Annual pension expense is also established through Board orders. Annual pension funding is based on actuarial valuations required by pension regulation.

7. AUTOMATIC ADJUSTMENT FORMULA

Regulatory Policy

1999 is the first year in which the Board will consider the operation of the automatic adjustment formula for rate of return on rate base outside of the context of a General Rate Proceeding.

As Newfoundland Power makes, and the Board approves, continued investment in plant and equipment to serve our customers, the Company's invested capital and rate base change. Such changes are the expected result of the continued investment.

The return on rate base approved by the Board each year must reflect the ongoing investments being made by the Company and approved by the Board. This requires that changes in invested capital and rate base, as well as those in long-Canada bond yields, be reflected in the automatic adjustment formula. Only then will the benefits of increased regulatory predictability and reduced regulatory uncertainty that motivated the adoption of the formula by the Board in 1998 be realized.

In this application, Newfoundland Power is specifically requesting approval of forecast 2000 values for rate base and invested capital for use in the automatic adjustment formula. These values result from expenditures made by the Company and approved by the Board. Their use in the formula will provide the just and reasonable return on rate base for 2000.

1 The Board is required to permit Newfoundland Power to earn a just and reasonable return in
2 2000 on its 2000 rate base. This requires the use of 2000 values for average rate base and
3 invested capital in the automatic adjustment formula. It is not appropriate for the Board to
4 approve 2000 capital expenditures which increase rate base and invested capital without allowing
5 the Company the required return on the increased rate base.

6
7 The alternative to using the forecast 2000 values is to continue to use the currently outdated 1999
8 projections which were before the Board at the 1998 General Rate Proceeding. Such a course
9 would effectively result in a just and reasonable return being provided on only part of the
10 Company's rate base as the approved investment for 2000 will not be considered in the
11 adjustment. This is a form of regulatory lag which the automatic adjustment formula was
12 adopted to avoid in cost of capital matters.

13
14 Prior to the 1998 opinion of the Newfoundland Court of Appeal on the Board's Stated Case, the
15 Company had believed the Board's approvals of capital expenditures were effectively approvals
16 of related changes to rate base. The Board's determinations in Order No. P.U. 36 (1998-99)
17 related to 1992 and 1993 earnings indicated this was not so. Annual reviews and approvals of
18 rate base and related values enhance overall regulatory transparency and ensure that both prices
19 paid by customers and returns available to investors are appropriately balanced on an ongoing
20 basis.

1 **Calculation of Rate of Return on Rate Base**

2 Schedule I (1st Revision) to the Application calculates the Rate of Return on Rate Base for 2000
3 using forecast values for average rate base and average invested capital and a cost of common
4 equity based upon the observed yields on 8 per cent (due 2027) and 5.75 per cent (due 2029)
5 long Canada bonds for the last five trading days in October 1999 and first five trading days in
6 November 1999. The observed yields on these bonds for this period together with the
7 calculation of the cost of common equity are shown in Exhibit JDS-4.

8
9 The calculations in Schedule I (1st Revision) yield a forecast rate of return on rate base for 2000
10 of 10.28 per cent. This is outside of the currently approved range of 9.80 per cent to 10.16 per
11 cent set by Order No. P.U. 36 (1998-99).

12
13 In accordance with Order No. P.U. 36 (1998-99), the rate of return on rate base must be reset at
14 10.28 per cent within a range of 10.10 per cent to 10.46 per cent.

15
16 **Required Revenue Adjustment**

17 The change in rate of return on rate base from 9.98 per cent to 10.28 per cent results in an
18 increase in test year revenue requirement of \$2,415,000, or 0.7 per cent, through the operation of
19 the automatic adjustment formula.

20
21 The calculation of test year revenue requirement is shown in Exhibit JDS-5.

8. 2000 FINANCING PLANS

Exhibit JDS-6 is a pro forma Statement of Company Cash Flows for 1999 and 2000. This statement identifies both the Company's sources of funds and the proposed use of those funds.

This statement indicates how much of the 2000 capital program the Company will be able to finance through the use of internally generated funds. The remainder will be financed through debt.

Internally generated funds include net income, those expenses on the income statement that do not require an outlay of cash and changes in working capital. For 2000, the total of these items of \$53,574,000 is reflected on line 6 of Exhibit JDS-6.

Each year cash outlays are required to meet Long Term Debt sinking fund obligations and the payment of dividends. The total of these outlays for 2000 of \$22,665,000 is reflected on line 10 in Exhibit JDS-6.

The Company's financing requirements for 2000 are estimated to be \$45,645,000 and are shown at line 16 of Exhibit JDS-6.

The net effect of cash flows in 2000 is shown on line 17 of Exhibit JDS-6 as a cash shortfall of \$14,736,000.

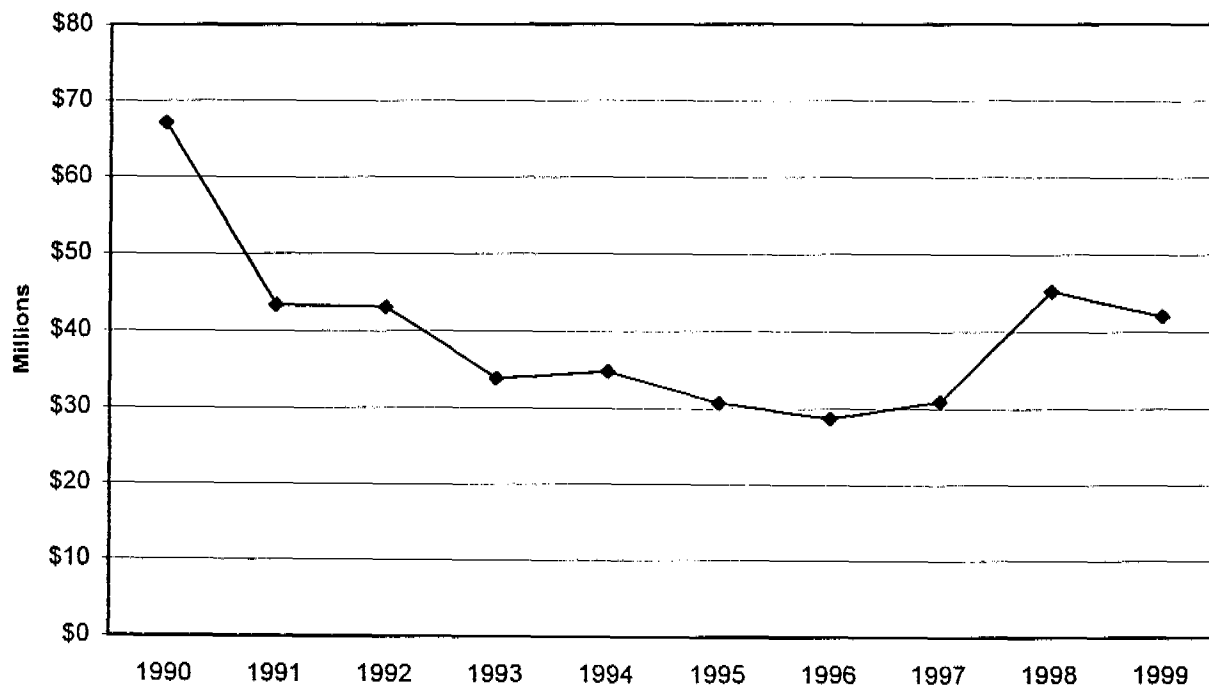
1 Based on current market conditions and economic forecasts, debt financing in 2000 is expected
2 to be through short term financing arrangements.

3
4 The economic threshold for consideration of a long bond issue generally occurs when the short
5 term loans approach \$50,000,000. Short term financing at year end 2000 is expected to be
6 around \$34,000,000. In analyzing the Company's cash flow position, it is important to
7 remember that year end requirements are generally higher than at other points throughout the
8 year. Similarly, month end cash positions generally reflect higher cash requirements than
9 monthly averages throughout the year.

10
11 The Company will continue to monitor the capital markets throughout the year to ensure its
12 current financing plans continue to be appropriate.

**Newfoundland Power Inc.
2000 Capital Budget**

**Capital Expenditures
1990 to 1999**



Year	(\$000s)
1990	67,073
1991	43,322
1992	43,080
1993	33,862
1994	34,773
1995	30,782
1996	28,770
1997	30,965
1998	45,245
1999	42,006

All Expenditures are expressed in current dollars, unadjusted for inflation.

**Newfoundland Power Inc.
2000 Capital Budget**

Overview

<u>Origin of Expenditure</u>	<u>2000 Capital Budget (000s)</u>	<u>Percentage of Budget</u>
Plant Replacement	\$ 25,402	61
Customer/Sales Growth	5,500	13
Information Systems	4,147	10
GEC, Allowance for Unforeseen & Financial	3,700	9
System Additions	2,286	5
Third Party Requirements	736	2
Total	<u><u>\$ 41,771</u></u>	<u><u>100</u></u>