

Pre-filed Testimony and Exhibits of Philip Hughes
2001 Capital Budget Hearing

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

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

- (a) (i) approving its 2001 Capital Budget; and (ii) approving leases for 2001 in excess of \$5,000 per year; and
- (b) (i) fixing and determining its average rate base for 1999 in the amount of \$505,688,000; (ii) approving its revised forecast average rate base for 2000 in the amount of \$518,724,000 ; and (iii) approving its forecast average rate base for 2001 in the amount of \$526,065,000; and
- (c) approving revised values for rate base and invested capital for use in the automatic adjustment formula (the "Automatic Adjustment Formula") for the calculation of return on rate base for 2001 pursuant to Orders No. P.U. 16 and 36 (1998-99) and No. P.U. 18 (1999-2000).

**Prefiled Testimony and Exhibits of
Philip Hughes and Barry Perry**

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1. INTRODUCTION

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

4

5 My name is Barry Perry. I am a Chartered Accountant and Vice President, Finance & Chief
6 Financial Officer with Newfoundland Power.

7

8 Our evidence will provide an overview of capital expenditures at Newfoundland Power
9 including a general review of 2000 capital expenditure variances and the capital expenditures
10 planned for 2001. In addition, we will present evidence on the Company's rate base,
11 invested capital, and financing plans for 2001.

12

13 Mr. John Evans, Vice President, Engineering and Energy Supply and Mr. Allan Skov,
14 Manager, Information Services will provide detailed evidence on 2000 capital expenditure
15 variances and planned capital expenditures for 2001.

2. CAPITAL EXPENDITURE OVERVIEW

1 The mandate of Newfoundland Power, as set out in the *Electrical Power Control Act, 1994*,
2 is to provide reliable electrical service at the lowest possible cost. Capital expenditures play
3 a central role in the fulfillment of that mandate.

4
5 As the number of customers rises, the Company must make appropriate capital investments
6 to meet growing service and energy requirements. As customers' expectations with respect
7 to service evolve, the Company must make appropriate investments in technology that enable
8 those expectations to be met. At the same time, the Company must ensure that investments
9 in the existing electrical system are such that the integrity and reliability of the system are
10 maintained.

11
12 The Company's customers have consistently told us that the most important considerations
13 with respect to their electrical service are reliability and price. Newfoundland Power's
14 capital program must therefore respond not only to customers' expectations of reliable and
15 flexible service, but it must ensure that capital expenditures are managed so as to minimize
16 both capital and operating costs over the longer term.

17
18 Throughout the 1990s Newfoundland Power managed its business with a focus on reducing
19 overall costs. This is reflected in the level of total annual capital expenditures for the period
20 1990 through 2000, which are shown in Exhibit PGH-1.

1 Prior to the early 1990s, the Company experienced relatively high levels of customer and
2 sales growth. This growth resulted in much of the electrical system being renewed before
3 deterioration and obsolescence made replacement necessary. There has been much less of
4 this in the low growth environment of more recent years. This is particularly true in rural
5 areas, where load growth has been less than one half of that in urban centers. Consequently,
6 electrical system components are in the field longer now than in previous decades. This
7 development has important implications for the Company and its customers.

8
9 Maximizing the operating life of assets tends to lower overall costs, which benefits our
10 customers. On the other hand, the longer that facilities are exposed to the stresses of the
11 Newfoundland climate, the greater will be the likelihood of failure. This has a tendency to
12 reduce the quality of service and increase costs.

13
14 Maintaining the appropriate balance between extending asset life and replacing assets before
15 deterioration causes problems is a managerial challenge for the Company, especially in a
16 climate where service interruptions often occur at the coldest time of year. In order to
17 minimize the inconvenience to, and discomfort of, our customers, the restoration of electrical
18 service following an equipment breakdown or severe weather event must be carried out
19 immediately, often under difficult conditions. In many cases, line staff must work overtime
20 to complete the work, and the necessary redeployment of resources will often disrupt other
21 work or cause other projects to be deferred. All of these things tend to increase the overall
22 cost of providing electrical service.

1 In 1998 and 1999, detailed engineering reviews and inspections of the Company's older lines
2 revealed that deterioration due to the age of the equipment and conductor, and exposure to
3 the elements, had taken a heavy toll. Since that time, the Company has adopted a more
4 proactive approach to ensuring service reliability. Replacing deteriorated plant before it can
5 lead to a service interruption facilitates better planning, and enables work to be carried out at
6 lower cost. Such proactive initiatives have become a more prominent feature of the
7 Company's capital expenditures. This will continue to be the case for some time into the
8 future.

9
10 Newfoundland Power's approach to plant replacement is a measured one that balances
11 customers' expectations as to cost and service. Plant replacement will be targeted in those
12 areas where failure rates are the highest, or where deterioration due to age and exposure is
13 most advanced. Approaching the matter in this way will benefit customers by extending
14 asset life and improving service quality at the lowest cost.

3. 2000 CAPITAL EXPENDITURES

1 The Company is currently forecasting 2000 capital expenditures, including 1999 carry-overs,
2 to be \$42.6 million, or \$0.8 million more than the capital budget of \$41.8 million approved by
3 the Board in Order No. P.U. 18 (1999-2000). The details of the variances are filed as a
4 separate report entitled, "*2000 Capital Expenditure Status Report*".
5

6 Variances can arise due to any number of circumstances including: changes in the work due
7 to third party requirements or field conditions; changes in priority due to new events; changes
8 to engineering or cost estimates; price changes or delays in the delivery of material and
9 equipment; and other unforeseen events that could not be reasonably anticipated during the
10 preparation of the budget.
11

12 While the overall expenditure is the result of numerous changes, the largest variance is the
13 Distribution category which is forecast to be \$1.9 million higher than budget. This variance in
14 2000 is the result of unforeseen demands due to customer growth, third party requests,
15 transformer replacements, and changes in the Old Perlican/Bay de Verde feeder project.

16 These additional demands resulted in the Company having to delay planned work on certain
17 distribution reliability, rebuild and feeder automation projects.
18

19 Mr. Evans and Mr. Skov will provide more detail on the capital expenditure variances in
20 their testimony.

4. 2001 CAPITAL EXPENDITURES

1 As in 2000, the primary focus of the 2001 capital budget is the refurbishment of our aging
2 electrical system.

3

4 The 2001 capital budget totals \$39.1 million, of which \$2.7 million is overhead that is
5 capitalized (General Expenses Capitalized). The 2001 capital budget is approximately 8 per
6 cent lower than the current forecast of 2000 capital expenditures of \$42.6 million.

7

8 Since Newfoundland Power is predominantly a distribution utility serving approximately
9 214,000 customers, the largest portion of our capital budget in any year is typically spent on
10 distribution assets. The Distribution capital budget for 2001 reflects this, and also reflects the
11 efforts the Company is focusing on problem feeders and long radial lines, and on renewing
12 the electrical system.

13

14 Exhibit PGH-2 provides a breakdown of the budgeted capital expenditures for 2001 showing
15 the fundamental reasons for the expenditures. Approximately \$20.3 million, or more than
16 half of the total capital budget, represents expenditures necessary for the refurbishment or
17 replacement of the existing electrical system.

18

19 In addition to ensuring the continuity of electrical service, Newfoundland Power also strives
20 to continually improve the level of customer service and the overall productivity of the
21 Company's operations. Our customer satisfaction surveys show that the number of our

1 customers who are satisfied with overall service has increased from 71 per cent in 1996 to 87
2 per cent in the 2nd Quarter of this year.

3

4 Customer service and productivity are important to the Company and its customers. While
5 making continual improvements in the quality of customer service, the Company also
6 continues to improve operating efficiency. The trend in each of operating costs per customer
7 and revenue per employee is clearly evident in the graphs contained in PGH-3. These trends
8 suggest Newfoundland Power's productivity is continuing to improve. Our customers will
9 continue to expect, and Newfoundland Power will continue to provide, efficient, flexible
10 customer service. At the same time, our customers expect, and the *Electrical Power Control*
11 *Act, 1994* requires, that we provide service as efficiently as possible, in order that customers'
12 electricity rates remain as low as possible.

13

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

17

18 One of the primary contributors to the achievement of these goals is our ongoing investment
19 in information technology. These investments allow us to continue to reduce costs and
20 improve the quality of customer service at the same time. Mr. Skov will provide details in
21 his testimony on the proposed 2001 expenditures on information technology.

1 Approximately \$7.4 million or 19 per cent of the budget is focused on providing electrical
2 service to new customers and meeting increased load from existing customers. This portion
3 of the budget is based on the customer and energy forecast prepared by Mr. Ronald Crane. A
4 summary of Mr. Crane's forecast is set out in Exhibit PGH - 4.

5

6 This year, the Company has submitted its capital budget for regulatory approval earlier than
7 usual. An earlier approval by the Board will give the Company a head start on detailed capital
8 planning and on the procurement of materials, which will allow us to commence capital work
9 early in the new year, if the weather cooperates.

10

11 Mr. Evans will provide more detail on the Company's capital planning process and capital
12 expenditure initiatives in his testimony.

5. RATE BASE, INVESTED CAPITAL AND FINANCING PLANS

1 Changes to Rate Base

2 Rate base, which is principally comprised of the Company's fixed assets, forms the basis of
3 regulation of Newfoundland Power's returns.

4

5 Schedule F to the Application shows the increase in average rate base from 1998 through
6 forecast 2001. The forecast average rate base for 2001 is \$526 million. Changes to the
7 Company's rate base are principally the result of two factors – capital expenditures and
8 depreciation. Capital expenditures increase the rate base while depreciation expense
9 decreases the rate base. When annual capital expenditures exceed annual depreciation, the
10 rate base increases.

11

12 The relationship between annual capital expenditure and rate base is a direct one. Each year
13 annual capital expenditure is added to plant investment. The calculation of plant investment
14 for 1998 and 1999, and forecast plant investment for 2000 and 2001, is shown in Exhibit
15 BVP-1. As can be seen in Schedule F, plant investment is the starting point for the
16 calculation of rate base.

17

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

1 **Changes to Invested Capital**

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

5

6 Changes in deferred charges also affect invested capital. Exhibit BVP-2 provides a detailed
7 breakdown of the Company's deferred charges for the years 1998 through 2001. Deferred
8 charges are costs that have already been incurred, but which are expected to be recovered
9 through future revenue. The largest deferred charge for the Company is related to pension
10 costs, and represents timing differences between the funding and expensing of these costs.
11 Other examples of deferred charges are unamortized debt expenses, capital stock issuance
12 expenses and deferred regulatory expenses.

13

14 As can be seen in Exhibit BVP-2, the increase in deferred charges from 1998 through 2001 is
15 primarily due to annual timing differences associated with pensions. Annual pension
16 expense is established through Board orders in accordance with the approach approved in
17 Order No. P.U. 17 (1987). Annual pension funding is based on actuarial valuations required
18 by pension regulation.

1 **Financing Plans for 2001**

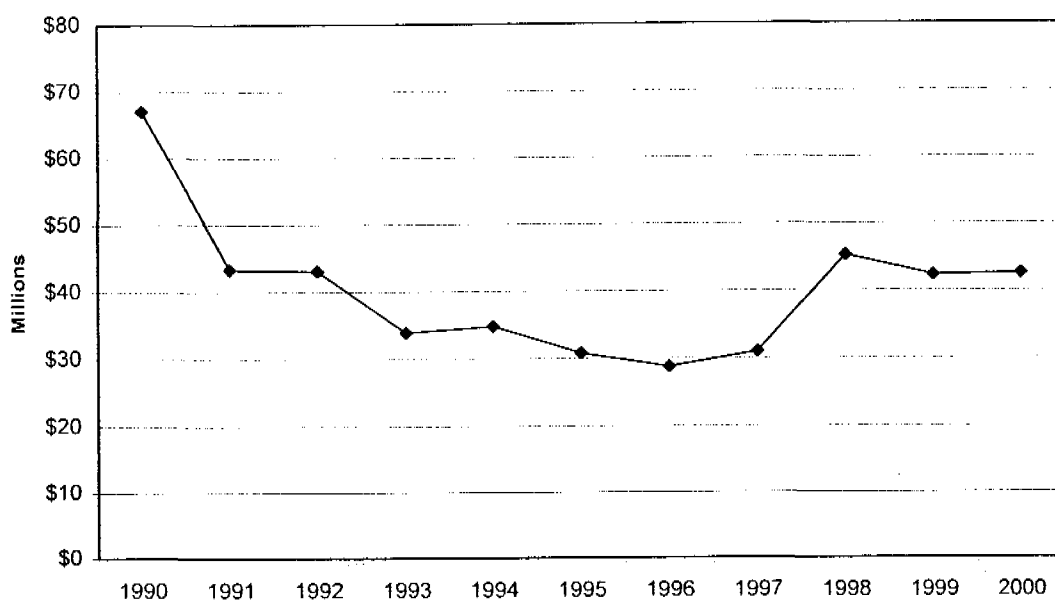
2 The funds required to finance the Company's capital program may come externally from the
3 issue of debt and internally from generated cash flow. The Company's cash flow is derived
4 from internally generated funds including net income, those expenses on the income
5 statement that do not require an outlay of cash, and changes in working capital.

6

7 For Newfoundland Power, the economic threshold for consideration of a debt issue generally
8 occurs when the total of short term loans approach \$50,000,000. Based on current economic
9 forecasts, the Company expects to finance its 2001 capital program through the use of
10 internally generated funds and existing short-term credit facilities. The Company will
11 continue to monitor the capital markets throughout the year to ensure its current financing
12 plans continue to be appropriate.

Newfoundland Power Inc.
2001 Capital Budget

Capital Expenditures
1990 to 2000



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	42,282
2000	42,584

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

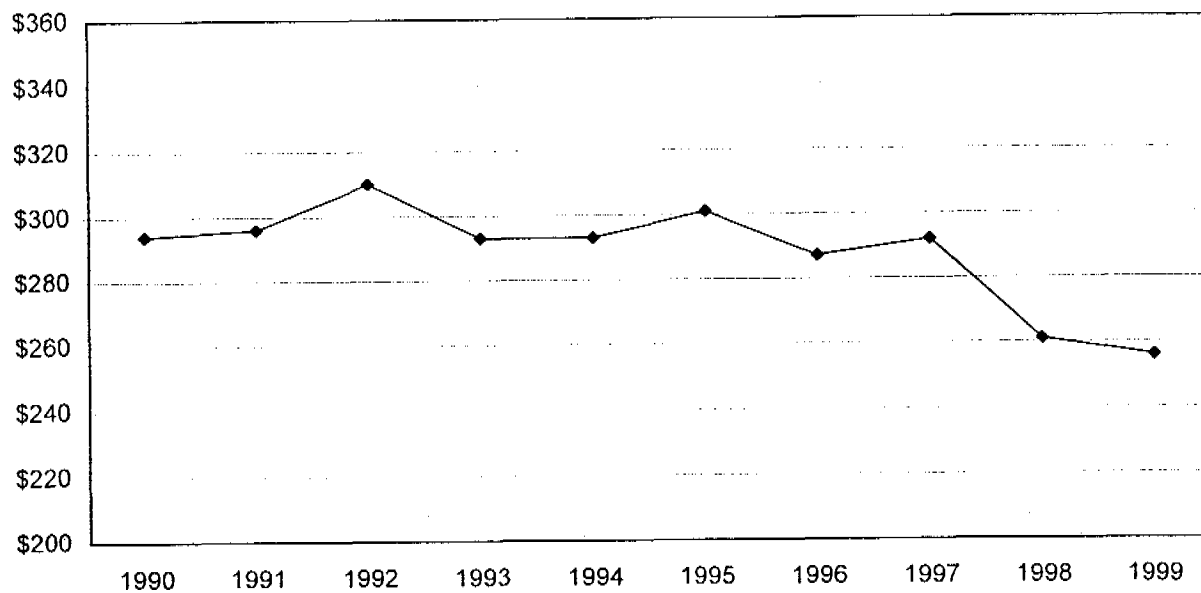
Newfoundland Power Inc.
2001 Capital Budget

Overview

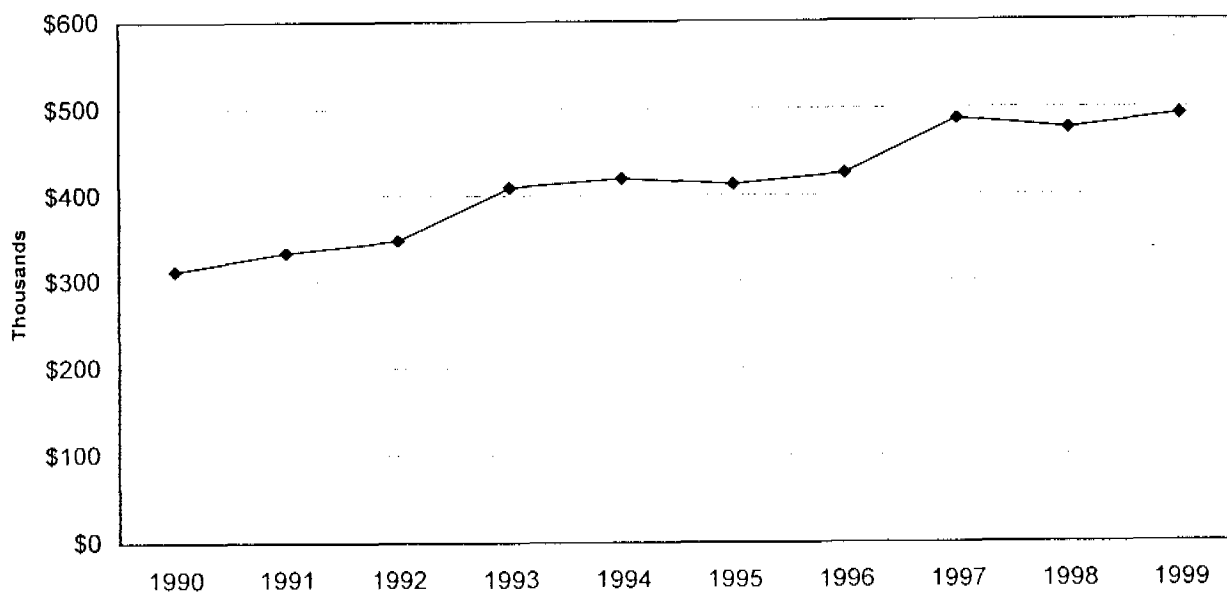
<u>Origin of Expenditure</u>	<u>2001 Capital Budget (000s)</u>	<u>Percentage of Budget</u>
Plant Replacement	\$ 20,307	52
Customer/Sales Growth	7,421	19
System Additions	3,886	10
Information Systems	3,619	9
GEC, Allowance for Unforeseen & Financial	3,500	9
Third Party Requirements	376	1
Total	<u>\$ 39,109</u>	<u>100</u>

**Newfoundland Power Inc.
2001 Capital Budget**

**Gross Operating Cost per Customer
1990 to 1999**



**Revenue per Employee
1990 to 1999**



NEWFOUNDLAND POWER INC.
2001 CUSTOMER AND ENERGY SALES FORECAST

Forecast Dated: July 2000

Prepared by: Ronald Crane

Introduction

The customer and energy sales forecast is used to develop the Company's estimates of capital expenditures associated with growth in the number of customers and in energy sales. The economic projections used in preparing the 2001 customer and energy sales forecast were provided by the Conference Board of Canada dated April 17, 2000.

The Economy

Fuelled primarily by an expanding offshore oil industry, growth in Newfoundland's Gross Domestic Product (GDP) is forecast to lead the nation in 2001 at 5.7 per cent.

With production from Hibernia increasing, and first oil from Terra Nova projected in 2001, oil production will be the primary factor influencing economic growth in 2001. This is reflected in the goods-producing sector which is forecast to grow by 14.8 per cent in 2001. However, electrical energy sales growth for Newfoundland Power is almost exclusively influenced by growth in the service sector of the economy. More specifically, changes in employment levels, consumer spending and population demographics in the Company's service territory are more determinative of sales growth than resource industry production levels. Service sector growth in 2001 is expected to be modest at 1.2 per cent.

Economic growth will not be uniform across Newfoundland Power's service territory. In the Northeast Avalon, growth will be robust principally due to the offshore oil industry. On the other hand, much of rural Newfoundland is expected to continue the trend of economic stagnation.

Customer and Energy Sales Growth

Page 5 shows Newfoundland Power's customer and energy sales forecast for 2001.

Residential customer growth is largely a result of housing starts which are forecast to be 1,650 units in 2001. The number of Residential customers is forecast to grow by 0.8 per cent in 2001. The forecast housing starts for 2001 is relatively low by historical standards. By comparison, for the 5 years from 1995 to 1999 actual housing starts averaged 1,653 units while for the 5 years from 1990 to 1994 they averaged 2,600 units.

Residential electricity consumption is a function of the major end uses in the home, such as, space heating, water heating, lighting, and other major appliances. In addition, changes in the cost of electricity and income have an impact on electricity consumption. The average use of energy is forecast to increase by 0.4 per cent in 2001.

The combined impact of increased numbers of customers and increased average use will contribute to a 1.2 per cent increase in residential energy sales volumes in 2001.

The number of General Service customers is forecast to grow by 0.7 per cent while General Service energy sales volumes are forecast to grow by 1.4 per cent in 2001. This is primarily the result of growth in provincial service sector gross domestic product of 1.2 per cent.

The number of street and area lighting customers is forecast to grow by 0.4 per cent while energy sales volumes to these customers will decrease by 0.9 per cent. The decrease in energy sales is attributed to the conversion of mercury vapor lights to high pressure sodium.

When you combine Residential, General Service, and Street and Area Lighting, the number of customers is forecast to grow by 0.8 per cent in 2001 while energy sales volumes are forecast to grow by 1.3 per cent.

Page 5 also provides the customer and energy sales forecast for 2001 on a regional basis. Given the disparity of economic growth on a regional basis the St. John's Region is expected to experience energy sales growth in 2001 of more than three times the rate of the rest of the Company's service territory and account for 75 per cent of growth in sales volume. But even in the St. John's region actual energy sales growth will be quite modest at 2.1 per cent.

Newfoundland Power Inc.
2001 Capital Budget

Customers and Energy Sales
2001 Forecast¹

<u>By Category</u>	<u>Customers</u>	<u>% Change</u>	<u>(GWh) Energy Sales</u>	<u>% Change</u>
Residential	186,998	0.8%	2,725.8	1.2%
General Service	20,815	0.7%	1,831.6	1.4%
Street & Area Lighting	9,334	0.4%	34.9	(0.9%)
Total	217,147	0.8%	4,592.3	1.3%
<u>By Region</u>				
St. John's	83,552	1.4%	2,143.3	2.1%
Avalon	33,697	0.6%	533.4	1.2%
Eastern	45,293	0.3%	873.0	(0.2%)
Western	54,605	0.4%	1,042.6	1.0%
Total	217,147	0.8%	4,592.3	1.3%

¹ Forecast dated May 10th, 2000.