# **Pre-filed Testimony and Exhibits of Philip Hughes**

# 2002 Capital Budget Hearing

#### IN THE MATTER OF the Public

Utilities Act, (the "Act"); and

**IN THE MATTER OF** an <u>amended</u> application by Newfoundland Power Inc. for an order pursuant to Sections 38, 41, 78 and 80 of the Act:

- (a) approving its 2002 Capital Budget; and
- (b) (i) fixing and determining its average rate base for 2000 in the amount of \$520,979,000; (ii) approving its revised forecast average rate base for 2001 in the amount of <u>\$541,496,000</u>; and (iii) approving its forecast average rate base for 2002 in the amount of <u>\$562,983,000</u>;
- (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 2002 pursuant to Orders No. P.U. 16 and 36 (1998-99), No. P.U. 18 (1999-2000) and P.U. 24 (2000-2001); and
- (d) consenting to the relocation of a gas turbine generator ("the Generator")

## Prefiled Testimony and Exhibits of Philip Hughes and Barry Perry (1<sup>st</sup> Revision)



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. 1	1. INTRODUCTION
2	
3	My name is Philip Hughes. I am President and Chief Executive Officer of Newfoundland
4	Power. I am also currently the Chair of the Energy Council of Canada and a member of the
5	Board of Directors of the Canadian Electricity Association.
6	
7	My name is Barry Perry. I am a Chartered Accountant and Vice President, Finance & Chief
8	Financial Officer with Newfoundland Power.
9	
10	Our evidence will provide a brief overview of capital expenditures at Newfoundland Power,
11	including a general discussion of both the 2001 capital expenditure variances and the capital
12	expenditures planned for 2002. In addition, we will present evidence on the Company's rate
13	base, invested capital, and financing plans for 2002.
14	
15	2. CAPITAL EXPENDITURE OVERVIEW
16	
17	The mandate of Newfoundland Power, as set out in the Electrical Power Control Act, 1994,
18	is to provide reliable electrical service at the lowest possible cost. Capital expenditures play
19	a central role in the fulfillment of that mandate.
20	
21	As the number of customers rises, the Company must make appropriate capital investments
22	to meet growing service and energy requirements. As customers' expectations with respect
23	to service evolve, the Company must make appropriate investments in technology that enable

those expectations to be met. At the same time, the Company must ensure that investments
 in the existing electrical system are such that the integrity and reliability of the system are
 maintained.

4

5 Customers have consistently told the Company that the most important considerations with 6 respect to their electrical service are reliability and price. Newfoundland Power's capital 7 program must therefore respond not only to customers' expectations of reliable and flexible 8 service, but it must ensure that capital expenditures are managed so as to minimize both 9 capital and operating costs over the longer term.

10

Prior to the early 1990s, the Company experienced relatively high levels of customer and sales growth. This growth resulted in much of the electrical system being renewed before deterioration and obsolescence made replacement necessary. In today's low growth environment there is much less of this, particularly in rural areas where load growth is a fraction of that in urban centers. Consequently, electrical system components are in the field longer now than in previous decades.

17

While maximizing the operating life of assets tends to lower overall costs, the longer that facilities are exposed to the stresses of the Newfoundland climate, the greater will be the likelihood of failure. The Company must therefore ensure an appropriate balance is maintained between extending asset life and replacing assets before deterioration causes problems. This is a managerial challenge for the Company, especially in a climate where service interruptions often occur at the coldest and windiest time of year.

In order to minimize the inconvenience to, and discomfort of, our customers, the restoration of electrical service following an equipment breakdown or severe weather event must be carried out immediately, often under difficult conditions. In many cases, line staff must work overtime to complete the work, and the necessary redeployment of resources will often disrupt other work or cause other projects to be deferred. All of these things tend to increase the overall cost of providing electrical service.

7

8 Over the last several years, the Company has adopted a more proactive approach to ensuring 9 service reliability by replacing deteriorated plant before it can lead to a service interruption. 10 The more proactive approach was a response to the significant deterioration of aged 11 equipment revealed by detailed engineering reviews and inspections. In the Company's 12 experience, this facilitates better planning and enables work to be carried out at a lower cost 13 than the traditional reactive response to equipment breakdown. As Mr. Ludlow's evidence 14 indicates, our recent proactive initiatives have resulted in reliability improvements in those 15 areas where reliability was significantly below average.

16

×

17 Another element of Newfoundland Power's proactive approach is its focus on the

18 environmental aspects of Company operations. Over the last several years, the Company has

19 undertaken a number of initiatives to minimize the impact on the environment of electrical

20 system operations. These initiatives ensure the Company maintains compliance with

21 environmental laws, and also reduces the overall cost of operations. Efforts to prevent spills

22 from oil-filled equipment, for example, enable the Company to avoid the significant clean-up

1	costs generally associated with such occurrences. The 2002 capital budget contains proposed		
2	expenditures directly related to environmental matters totaling in excess of \$1.2 million.		
3			
4	In 2001, Newfoundland Power's generation section achieved ISO 14001 registration.		
5	Acceptance of the Company's application for registration is an acknowledgment that the		
6	Company's generation activities conform to a recognized standard of international best		
7	practices in environmental management.		
8			
9	As the Company's proactive approach to improving service levels continues to evolve, there		
10	will be an increased focus on strengthening the electrical supply to those areas currently		
11	served by radial transmission or distribution lines. Through such means as distributed		
12	generation and distribution automation, we expect to achieve the kinds of improvements in		
13	those areas that our recent focus on system refurbishment has already made possible for		
14	many of our customers.		
15			
16	3. 2001 CAPITAL EXPENDITURES		
17			
18	The Company is currently forecasting 2001 capital expenditures to be <u>\$63.0</u> million, which is		
19	approximately equal to the total capital expenditures approved by the Board in Order Nos.		
20	P.U. 24 (2000-2001), P.U. 12 (2001-2002) and P.U. 17 (2001-2002). While the overall		
21	expenditure is in line with the approved capital budget, there were a number of variances in		
22	individual areas of spending.		
23			

1	Variances can arise due to any number of circumstances including: changes in the work due to
2	third party requirements or field conditions; changes in priority due to new events; changes in
3	engineering or cost estimates; price changes or delays in the delivery of material and
4	equipment; and other unforeseen circumstances that could not be reasonably anticipated
5	during the preparation of the budget.
6	
7	The details of the individual variances have been filed in a separate report entitled, "2001
8	Capital Expenditure Status Report".
9	
10	4. 2002 CAPITAL EXPENDITURES
11	
12	The 2002 capital budget totals <u>\$54.6</u> million, including \$2.5 million of capitalized overhead
13	(General Expenses Capital). As in recent years, the primary focus of the 2002 capital budget
14	is the refurbishment of our aging electrical system.
15	
16	Since Newfoundland Power is predominantly a distribution utility serving approximately
17	215,000 customers, the largest portion of our capital budget in any year is typically spent on
18	distribution assets. The Distribution capital budget for 2002 reflects this, and also reflects the
19	efforts the Company is focusing on problem feeders and long radial lines, and on renewing
20	the electrical system.
21	
22	Exhibit PGH-1 (1 <sup>st</sup> Revision) provides a breakdown of the budgeted capital expenditures for
23	2002 showing the fundamental reasons for the expenditures. Approximately <u>\$26.6</u> million,

1 or  $\underline{49}$  per cent of the total capital budget, represents expenditures necessary for the

2 refurbishment or replacement of the existing electrical system.

3

4	Approximately <u>\$7.9</u> million or <u>29</u> per cent of the Distribution budget is focused on providing		
5	electrical service to new customers and meeting increased load from existing customers.		
6	This portion of the budget is based on the customer and energy forecast prepared by		
7	Mr. Ronald Crane. A summary of Mr. Crane's forecast is set out in Exhibit BVP-1.		
8			
9	In addition to ensuring the continuity of electrical service, Newfoundland Power also strives		
10	to continually improve the level of customer service and the overall productivity of the		
11	Company's operations. Our customer satisfaction surveys show that the number of our		
12	customers who are satisfied with overall service has increased from 71 per cent in 1996 to 91		
13	per cent in the 2 <sup>nd</sup> Quarter of this year.		
14			
15	Customer service and productivity are important to the Company and its customers. While		
16	making continual improvements in the quality of customer service, the Company also		
17	continues to improve operating efficiency. The trend in each of gross operating costs per		
18	customer and revenue per employee is clearly evident in the graphs contained in Exhibit		
19	PGH-2. These trends suggest Newfoundland Power's productivity is continuing to improve.		
20	Our customers will continue to expect, and Newfoundland Power will continue to provide,		
21	efficient, flexible customer service. At the same time, our customers expect, and the		
22	Electrical Power Control Act, 1994 requires, that we provide service as efficiently as		
23	possible, in order that customers' electricity rates remain as low as possible.		

- If we are to continue to succeed in this regard, it is necessary that we achieve greater
   efficiencies in our operations. Customer service delivery must continue to improve and costs
   must continue to be kept under control.
- 4

5 One of the primary contributors to the achievement of these goals is our ongoing investment 6 in information technology. These investments allow us to continue to reduce costs and 7 improve the quality of customer service at the same time. In August of this year, the success 8 of the Company's customer service initiatives was recognized with a national business award 9 from the Canadian Information Productivity Awards (CIPA), the largest business awards 10 program in Canada. CIPA's Award of Excellence in Customer Care recognized 11 Newfoundland Power's innovative use of technology and our focus on employee 12 development in providing superior customer service. Along with the results of our recent 13 customer satisfaction surveys, this award is an independent third party indication that our 14 ongoing investment in information technology is of real benefit to our customers. 15 As in 2000, the Company has submitted its capital budget for regulatory approval in the 3<sup>rd</sup> 16 17 quarter of the year. An earlier approval by the Board will give the Company a head start on 18 detailed capital planning and on the procurement of materials which, if the weather 19 cooperates, will allow us to commence capital work early. 20 21 Mr. Ludlow will provide more detail on the Company's capital planning process and capital 22 expenditure initiatives in his testimony.

23

1	5. RATE BASE, INVESTED CAPITAL AND FINANCING PLANS		
2	Changes to Rate Base		
3	Rate base, which is principally comprised of the Company's fixed assets, forms the basis of		
4	regulation of Newfoundland Power's returns.		
5			
6	Schedule E (1 <sup>st</sup> Revision) to the <u>amended</u> Application shows the increase in average rate base		
7	from 1999 through forecast 2002. The forecast average rate base for 2002 is \$563 million.		
8	Changes to the Company's rate base are principally the result of two factors - capital		
9	expenditures and depreciation. Capital expenditures increase the rate base while depreciation		
10	expense decreases the rate base. When annual capital expenditures exceed annual		
11	depreciation, the rate base increases.		
12			
13	The relationship between annual capital expenditure and rate base is a direct one. Each year		
14	annual capital expenditure is added to plant investment. The calculation of plant investment		
15	for 2000, and forecast plant investment for 2001 and 2002, is shown in Exhibit BVP-2 ( $1^{st}$ )		
16	<u>Revision</u> ). As can be seen in Schedule E ( $1^{st}$ Revision), plant investment is the starting point		
17	for the calculation of rate base.		
18			
19	Each year, the Company's capital expenditures are considered and approved by the Board.		
20	Each year, the annual depreciation expense is calculated using the composite rates approved		
21	by the Board in Order No. P.U. 7 (1996-97).		
22			

## 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-3 (1 <sup>st</sup> Revision)		
7	provides a detailed breakdown of the Company's deferred charges for the years 2000 through		
8	2002. Deferred charges are costs that have already been incurred, but which are expected to		
9	be recovered through future revenue. The largest deferred charge for the Company is related		
10	to pension costs, and represents timing differences between the funding and expensing of		
11	these costs. Other examples of deferred charges are unamortized debt expenses, capital stock		
12	issuance expenses and deferred regulatory expenses.		
13			
14	As can be seen in Exhibit BVP-3 ( $1^{st}$ Revision), the increase in deferred charges from 2000		
14 15	As can be seen in Exhibit BVP-3 (1 <sup>st</sup> Revision), the increase in deferred charges from 2000 through 2002 is primarily due to annual timing differences associated with pensions. Annual		
15	through 2002 is primarily due to annual timing differences associated with pensions. Annual		
15 16	through 2002 is primarily due to annual timing differences associated with pensions. Annual pension expense is established through Board orders in accordance with the approach		
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15 16 17 18 19 20	through 2002 is primarily due to annual timing differences associated with pensions. Annual pension expense is established through Board orders in accordance with the approach approved in Order No. P.U. 17 (1987). Annual pension funding is based on actuarial valuations required by pension regulation. <b>Financing Plans for 2002</b>		
15 16 17 18 19 20 21	through 2002 is primarily due to annual timing differences associated with pensions. Annual pension expense is established through Board orders in accordance with the approach approved in Order No. P.U. 17 (1987). Annual pension funding is based on actuarial valuations required by pension regulation.  Financing Plans for 2002 The funds required to finance the Company's capital program may come externally from the		

For Newfoundland Power, the economic threshold for consideration of a debt issue generally occurs when the total of short term loans approaches \$50 million. Based on current projections, short term loans are expected to exceed \$50 million by year-end 2001. Based on this, Newfoundland Power currently anticipates a long term debt financing in 2001. The timing of such a financing will depend upon market conditions. The Company will continue to monitor the capital markets throughout the year to ensure its current financing plans continue to be appropriate.

### Newfoundland Power Inc. 2002 Capital Budget

Overview

Origin of Expenditure	2002 Capital Budget (000s)	Percentage of Budget
Plant Replacement	\$ 26,595	49
Aliant Pole Purchase	8,088	15
Customer/Sales Growth	7,873	14
Information Systems	6,298	
GEC, Allowance for Unforeseen & Financial	3,350	91 <b>. 6</b>
System Additions	2,095	4
Third Party Requirements	320	1
Total	\$ 54,619	100

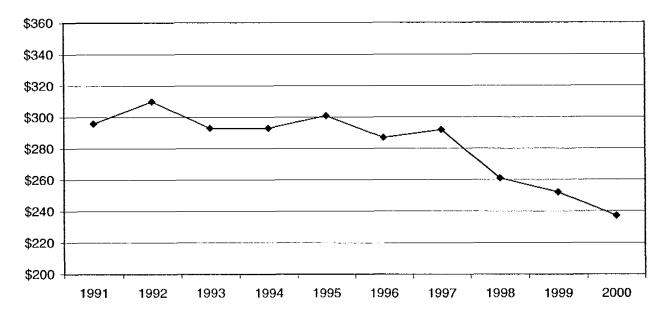
### Newfoundland Power Inc. 2002 Capital Budget

## Overview

Origin of Expenditure	2002 Capital Budget (000s)	Percentage of Budget
Origin of Experiment	(0005)	
Plant Replacement	\$ 25,572	57
Customer/Sales Growth	6,974	16
Information Systems	6,298	14
GEC, Allowance for		_
Unforeseen & Financial	3,350	7
System Additions	2,095	5
Third Party Requirements	320	1
Total	\$ 44,609	100

### Newfoundland Power Inc. 2002 Capital Budget

Gross Operating Cost per Customer 1991 to 2000



Revenue per Employee 1991 to 2000

