Pre-filed Testimony and Exhibits of Philip Hughes
2003 Capital Budget Hearing

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

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

- (a) approving its 2003 Capital Budget; and
- (b) fixing and determining its average rate base for 2001 in the amount of \$545,162,000.

# Prefiled Testimony and Exhibits of Philip Hughes and Barry Perry



At the hearing into Newfoundland Power's 2003 Capital Budget Application, the following Evidence will be adopted by Philip Hughes, C.A., President & Chief Executive Officer of Newfoundland Power and Barry Perry, C.A., Vice President, Finance & Chief Financial Officer of Newfoundland Power.

Witness profiles for Philip Hughes and Barry Perry follow.

Philip Hughes, C.A.

President & Chief Executive Officer

Newfoundland Power Inc.

Philip Hughes has served as President & Chief Executive Officer of Newfoundland Power Inc. since 1997.

From 1995 to 1996, Mr. Hughes was President & Chief Executive Officer of Maritime Electric Company Limited. He joined Maritime Electric as Vice President, Finance & Chief Financial Officer in 1992.

From 1990 to 1992, Mr. Hughes was President & Chief Executive Officer of Trans Gas Limited, a natural gas transmission company in Regina, Saskatchewan. From 1988 to 1991, he served as Vice-President, Finance & Chief Financial Officer of SaskEnergy.

Mr. Hughes is currently Chair of the Energy Council of Canada and is a Director and past Chair of the Canadian Electricity Association.

Mr. Hughes has testified before the Board of Commissioners of Public Utilities of Newfoundland and Labrador on several occasions in his capacity as President & Chief Executive Officer of Newfoundland Power Inc.

Mr. Hughes is a graduate of the University of Lancaster (B.A. (Hons.) Economics, 1977). He is a member of the Institutes of Chartered Accountants of Alberta and Newfoundland and a Fellow of the Institute of Chartered Accountants of England and Wales.

Barry Perry, C.A. Vice President, Finance & Chief Financial Officer Newfoundland Power Inc.

Barry Perry joined Newfoundland Power in 2000 as Vice President, Finance and Chief Financial Officer.

Prior to 2000, Mr. Perry was Vice President-Treasurer with Abitibi-Consolidated Inc. (Abitibi), Quebec. Mr. Perry commenced employment with Abitibi as Chief Financial Officer of the Company's International Business Unit which included the two newsprint mills and woodland operations located in Newfoundland. Mr. Perry has also served as Director, Financial Reporting for Abitibi.

Prior to joining Abitibi-Consolidated Inc., Mr. Perry was Corporate Controller of Newfoundland Processing Inc., the owner/operator of the Come by Chance Oil Refinery.

Mr. Perry obtained his Chartered Accountant designation while working with Ernst & Young Chartered Accountants in St. John's, Newfoundland.

Mr. Perry is a graduate of Memorial University of Newfoundland (Bachelor of Commerce (Honours), 1986) and is a member of the Institute of Chartered Accountants of Newfoundland.

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SUMMARY OF EVIDENCE 1 Newfoundland Power is managing and operating its assets efficiently with a view to delivering 2 3 service to its customers at the lowest possible cost consistent with reliable service. 4 Newfoundland Power's capital budget for 2003 totals \$55.8 million. The Company's capital 5 6 expenditures are driven by a number of causes. 7 The first, asset replacement or upgrading, balances the maximization of asset lives with the 8 proactive replacement of deteriorated or inefficient plant, and accounts for approximately 50 per 9 10 cent of the 2003 capital budget. 11 The second area involves responding to customer requirements for new service or additional 12 capacity, and fulfills Newfoundland Power's mandate to serve customers within its service area. 13 14 Providing electrical service to new customers and meeting increased load from existing 15 customers represents approximately 20 per cent of the 2003 capital budget. 16 The third area of capital investment is directed towards improving overall productivity, by 17 18 investing in technology that enables the Company to operate its electrical system more 19 effectively and more efficiently while delivering reliable electrical service to customers at the 20 lowest possible cost. Approximately 10 per cent of the 2003 capital budget is comprised of

investments in technology intended to maintain or improve productivity and customer service.

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- 1 The remaining capital expenditures are driven by a variety of causes. The more prominent of
- 2 these for the 2003 capital budget include the Aliant Pole Purchase approved by the Board in
- 3 Order No. P.U. 17 (2001-2002) and the allocation to general expenses capital ("GEC") approved
- 4 by Order No. P.U. 3 (1995-1996).

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- 6 Variances in the 2002 capital budget are described in a separate report that has been filed entitled
- 7 2002 Capital Expenditure Status Report.

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- 9 For the purpose of regulatory continuity, Newfoundland Power is requesting that the Board
- approve its 2001 average rate base in the amount of \$545,162,000.

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- 12 The 2003 capital budget will be financed by internally generated funds and short term debt until
- 13 after 2004.

1 1. CAPITAL EXPENDITURE OVERVIEW The Electrical Power Control Act, 1994, effectively requires that Newfoundland Power serve 2 its customers at the lowest possible cost consistent with reliable service. Consistent with that 3 4 mandate, customers rank reliability of supply and price as the most important attributes of 5 electrical service. Capital expenditures play a central role in the fulfillment of the Company's 6 service obligation to its customers. 7 8 Newfoundland Power's annual capital budgets over the past 5 years have been focused on the 9 replacement of deteriorated assets; investment in assets related to growth in energy sales and 10 the number of customers; and technology investments aimed at improving customer service 11 and operational productivity. 12 13 Introduction 1.1 14 The electrical utility industry is capital intensive. Newfoundland Power has approximately \$1 15 billion invested in capital plant and equipment. 16 17 The ability of Newfoundland Power to meet its statutory obligations to provide quality electrical 18 service to its customers is largely dependant upon the quality and condition of its capital plant. 19 The ability to efficiently manage and operate Newfoundland Power's electrical system in order 20 21 to deliver electrical energy to customers at the lowest possible cost consistent with reliable 22 service is also dependant upon the quality and condition of capital plant. 23 24 Replacement of electrical plant which is deteriorated, defective or obsolete has been a key focus 25 of Newfoundland Power's capital budgets in recent years.

- 1 Another area of capital expenditures relates to the installation of new plant and equipment
- 2 necessary to meet customer requirements, whether as a result of new customers or increased
- 3 demand from existing customers.

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- 5 A third type of investment is related to acquiring assets the function of which is to increase
- 6 productivity in the management and operation of the electrical system. Increased productivity
- 7 will reduce operating costs. Such investments can also improve the Company's overall service.

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9 Newfoundland Power manages its business with a view to overall costs.

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- 11 Since 1992:
- Gross operating expenses have been reduced by approximately 22 per cent on a historical
- basis (34 per cent on an inflation adjusted basis);
- The workforce has decreased by approximately 33 per cent;
- The number of customers served has increased by approximately 10 per cent; and
- The volume of energy sales has increased by approximately 10 per cent.

- 18 These numbers substantiate the Company's success in improving service to its customers, while
- 19 at the same time reducing the overall cost of providing that service. This success is in large part
- 20 a result of the success of the Company's capital expenditure programs to date.

#### 1.2 Asset Replacement

2 Newfoundland Power has invested approximately \$1 billion in fixed assets. The replacement of

3 deteriorated, defective or obsolete assets is a key aspect of capital expenditure for Newfoundland

Power and typically accounts for approximately 50 per cent of annual capital expenditures.

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6 Newfoundland Power's approach to capital investment in the electrical system balances the

7 maximization of asset lives with the proactive replacement of deteriorated or inefficient plant.

Maximizing the operating life of assets tends to lower overall costs. However, the longer that

facilities are exposed to the stresses of the Newfoundland climate, the greater will be the

likelihood of failure. In decades past, electrical system plant and equipment was replaced in the

normal course of system upgrade or construction to meet the rapid growth in the number of

customers and increased customer load demand. In the low growth environment of the last

decade, however, this has not occurred to the same extent, with the result that electrical system

14 components have tended to remain in the field longer.

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Replacing deteriorated electrical equipment before it causes a service interruption facilitates better planning and enables work to be carried out at lower cost. In a climate where service interruptions often occur at the coldest and windiest time of year, it is essential that power restoration be carried out immediately, often in difficult conditions. This can increase overall costs. In addition, service interruptions also negatively affect the economy of the territory the Company serves. The Company must therefore ensure an appropriate balance is maintained

between extending asset life and replacing assets before deterioration causes problems.

Over the last several years, the Company has adopted a more proactive approach to ensuring 1 service reliability by replacing severely deteriorated plant before it can lead to a service 2 interruption. Plant replacement is targeted in areas where failure reports are the highest, where 3 deterioration due to age and exposure is more evident, and where the consequence of an 4 5 interruption is likely to be more significant. 6 In determining when to replace defective, deteriorated or obsolete plant, the Company must 7 consider factors in addition to likelihood of failure. For example, safety and environmental 8 9 factors also influence the timing of plant replacement. 10 Company programs during the last several years have addressed faulty insulators, deteriorating 11 transformers and the refurbishment of distribution feeders. As a result, much of the Company's 12 electrical system has been improved and is now more capable of withstanding the rigours of the 13 14 Newfoundland climate. This has helped the Company to achieve reductions in both the 15 frequency and duration of outages. 16 A key factor affecting the amount of investment to replace deteriorated plant relates to the long 17 life of electrical assets. For the majority of assets in which Newfoundland Power invests, the 18 average useful life is approximately 30 years. Replacing such assets carries significant cost 19 impacts related solely to inflation. Over the past 30 years, inflation has been in the order of 350 20 per cent. This implies that the replacement cost of a 30 year old asset will be in the order of 3 21

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and one-half times the original cost.

#### 1 1.3 Serving New Customers

- 2 The Public Utilities Act requires Newfoundland Power to provide customers in its service
- 3 territory with electrical service.

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- 5 In recent years, the proportion of Newfoundland Power's annual capital budget which has been
- 6 driven by growth in energy sales and the number of customers has been between 10 and 20 per
- 7 cent. The majority of these expenditures are related to distribution assets such as extensions,
- 8 meters, services and transformers.

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#### 1.4 Technology Investment

#### 11 1.4.1 Quality of Service

- 12 Information technology investments such as the Company's System Control and Data
- 13 Acquisition ("SCADA") System and enhancements to the Problem Call Logging System have
- 14 enabled Newfoundland Power to reduce its response time by providing early notification to the
- 15 Company of power interruptions. This enables more efficient dispatch of service crews and, in
- some instances, allows the Company to remotely control equipment to restore power without
- dispatching a service crew at all. All of this improves service reliability, particularly by reducing
- 18 the length of outages. These types of technology investments also improve operational
- 19 efficiency.

- 21 The Company operates and maintains 23 hydro generating plants, 5 diesel plants, 3 gas turbine
- facilities, 137 substations and 298 feeders. Of these, 22 hydro generating plants, 71 substations
- and 184 feeders are now monitored remotely by the SCADA System. The Company will

continue to invest in equipment that can be remotely monitored and controlled by SCADA where 1 2 it is cost effective to do so. 3 In addition to improvements in operational efficiency and service reliability, information 4 technology enables improvements in the quality of customers' day-to-day interactions with the 5 Company. Customers' expectations in this regard are constantly evolving. Meeting customers' 6 expectations of enhanced telephone service and a variety of bill payment options requires 7 ongoing investment in information technology. 8 9 10 The Company's most recent customer satisfaction surveys show that the number of our 11 customers who are satisfied with overall service has increased from 70 per cent in 1996 to 90 per cent in 2001 and 2002. 12 13 14 1.4.2 Productivity Improvement 15 Many of the Company's investments in technology in both customer service and electrical 16 system operations have contributed to productivity improvements in addition to the 17 improvements in the quality of customer service. 18 For example, as a result of technology improvements in the Customer Contact Centre, the 19 20 capacity to respond to customer calls is now supplemented by staff in the Company's regional 21 offices during times of peak call volume. The technology also affords callers who simply require 22 account balance information the option of an automated response. In 2001, of 460 thousand

customer calls, over 136 thousand were responded to via the automated application and over 17

thousand were responded to by regional staff. These features have reduced the requirement for 1 2 temporary labour in the Customer Contact Centre. 3 Planned capital expenditures on information technology in 2003 will facilitate further 4 improvements in the planning of work in electrical systems operations and in the dispatch of 5 operations personnel. Newfoundland Power will continue to make capital investments that will 6 have the effect of reducing the overall cost of service for customers. 7 8 The Company's investments in information technology are addressed in the testimony of Nora 9 Duke, Vice-President Customer and Corporate Services and Peter Collins, Manager of 10 Information Services which has been filed in this proceeding. 11 12 2. 2003 CAPITAL EXPENDITURES 13 This section of the evidence outlines the 2003 capital budget of Newfoundland Power and 14 indicates the principal underlying reasons for the investments contained in the capital budget. 15 16 The 2003 capital budget totals \$55.8 million, including \$2.8 million of GEC. As in recent years, 17 the primary focus of the 2003 capital budget is the refurbishment of the aging electrical system. 18 19 Exhibit PGH-1 provides a breakdown of the budgeted capital expenditures for 2003 showing the 20 fundamental causes for the expenditures. Approximately \$28.4 million, or 50 per cent of the 21 total capital budget, represents expenditures necessary for the refurbishment or replacement of 22 23 the existing electrical system. 24

Approximately \$11 million, or 20 per cent of the total capital budget, is focused on providing 1 2 electrical service to new customers and meeting increased load from existing customers. This portion of the budget is driven by the Company's forecast of increases in the number of 3 customers and energy sales. A summary of the Company's most recent forecast, prepared in 4 support of the General Rate Application, is set out in Exhibit BVP-1. The forecast indicates that 5 the number of customers and energy sales will increase by 0.7 per cent and 1.9 per cent 6 7 respectively in 2003. 8 Approximately \$5.5 million, or 10 per cent of the total capital budget, relates to technology 9 investments in information systems. These expenditures will enable the Company to continue to 10 11 operate efficiently and improve overall customer service. 12 The remaining portions of the budget total approximately \$10.9 million, or 20 per cent of the 13 total capital budget. The largest items in this are approximately \$4 million related to the Aliant 14 15 pole purchase approved by the Board in Order No. P.U. 17 (2001-2002) and approximately \$3.7 million related to GEC, the allowance for unforeseen events, and interest charged to 16 17 construction. 18 A more detailed review of the Company's capital planning process and capital expenditure 19 20 initiatives is provided in the testimony of Earl Ludlow, the Company's Vice-President, 21 Engineering and Operations which has been filed in this proceeding. 22

3. 2002 CAPITAL EXPENDITURES 1 This section of the evidence briefly outlines variances in the 2002 capital budget. 2 3 4 The Company has forecast 2002 capital expenditures to be \$57.3 million, based on estimates as of 5 June 30, 2002. This is approximately \$0.6 million less than the total capital expenditures approved by the Board in Order Nos. P.U. 21 (2001-2002), and P.U. 15 (2002-2003). While the 6 7 overall expenditure is in line with the approved capital budget, there were a number of variances 8 in individual areas of spending. 9 Variances can arise due to any number of circumstances including: changes in the work due to 10 third party requirements or field conditions; changes in priority due to new events; changes in 11 engineering or cost estimates; price changes or delays in the delivery of material and equipment; 12 and other unforeseen circumstances that could not be reasonably anticipated during budget 13 14 preparation. 15 16 The details of the individual variances have been filed in a separate report entitled, 2002 Capital Expenditure Status Report. More current information regarding 2002 capital expenditures and 17

resulting variances will be presented at the hearing of this Application.

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#### **4. 2001 RATE BASE**

Newfoundland Power's rate base is a cornerstone of the Board's regulation of the Company. 2 For the purposes of regulatory continuity, as part of its capital budget presentation, 3 4 Newfoundland Power seeks approval of its prior year's rate base. 5 Rate base, which is principally comprised of the Company's fixed assets, forms the basis of 6 regulation of Newfoundland Power's returns. Schedule F to the Application shows the average 7 8 rate base for 2000 and 2001. The 2000 average rate base of \$520,979,000 was approved in 9 Order No. P.U. 21 (2001-2002). The average rate base for 2001 is \$545,162,000, as filed with 10 the Board on March 27, 2002 in Return 3 of the Company's 2001 Annual Return. 11 Changes to the Company's rate base are principally the result of two factors - capital 12 expenditures and depreciation. Capital expenditures increase the rate base while depreciation 13 expense decreases the rate base. When annual capital expenditures exceed annual depreciation, 14 15 the rate base increases. 16 As can be seen in Schedule F, plant investment is the starting point for the calculation of rate 17 18 base. The increase in the Company's average rate base from 2000 to 2001 is primarily due to 19 increases in plant investment. The plant investment increase is a direct result of the Company's 20 2001 capital expenditures approved by the Board in Order Nos. P.U. 24 (2000-2001), and P.U. 21 12 (2001-2002). Plant investment for the year also includes approximately \$20 million of joint-22 use poles purchased from Aliant Telecom Inc, approved by Order No. P.U. 17 (2001-2002).

The other significant variable impacting the average rate base is annual depreciation expense. 1 Each year, annual depreciation expense is calculated using the composite rates approved by the 2 Board. Newfoundland Power's current depreciation rates were approved in Order No. P.U. 7 3 (1996-97).4 5 5. FINANCING 2003 CAPITAL EXPENDITURES 6 This section of the evidence outlines Newfoundland Power's current plans for financing its 7 8 2003 capital budget. 9 10 The funds required to finance the Company's capital program come externally from the issue of debt and internally from generated cash flow. The Company's cash flow is derived from 11 internally generated funds including net income, those expenses on the income statement that do 12 13 not require an outlay of cash, and changes in working capital. 14 15 Internally generated cash flow and short term debt are utilized until short term borrowing requirements approach a level where the Company considers a long term debt financing to be 16 appropriate. The Company monitors capital markets to assess the appropriate timing of long 17 18 term debt issues. 19 20 In late October 2002, Newfoundland Power anticipates closing the issue of \$75,000,000 Series AJ First Mortgage Sinking Fund Bonds. The Company currently does not forecast another long 21 term debt issue until after 2004. Until Newfoundland Power issues further long term debt, 2003 22

capital expenditures will be financed through internally generated funds and short term debt.

## Newfoundland Power Inc. 2003 Capital Budget

#### Overview

		2003 Capital Budget	Percentage of
	Origin of Expenditure	<u>(000s)</u>	Budget
1	Plant Replacement	\$ 28,414	50.9
2			
3	Customer/Sales Growth	11,000	19.7
4			
5	Information Systems	5,507	9.9
6			
7	Aliant Pole Purchase	4,044	7.3
8			
9	GEC, Allowance for		
10	Unforeseen & Financial	3,650	6.5
11			
12	System Additions	2,900	5.2
13			
14	Third Party Requirements	275	0.5
15			
16	Total	\$ 55,790	100.0