HAND DELIVERED

January 12, 2004

Board of Commissioners of Public Utilities P.O. Box 21040 120 Torbay Road St. John's, NF A1A 5B2

Attn: Ms. Cheryl Blundon Board Secretary

Ladies and Gentlemen:

Re: Newfoundland and Labrador Hydro 2003 General Rate Application

Enclosed are the original and 10 copies of Newfoundland Power's Brief of Argument.

An electronic and paper copy will be forwarded to each registered intervenor directly.

We trust the enclosed are in order.

Yours very truly,

lan F. Kelly, Q.C. Counsel for Newfoundland Power

Enclosures

c. Ms. Maureen P. Greene, Q.C. Newfoundland and Labrador Hydro

> Mark Kennedy Board Hearing Counsel

Mr. Colm Seviour and Ms. Meg Gillies/Mr. Joseph S. Hutchings Counsel to the Industrial Customers

Mr. Dennis Browne, Q.C. Consumer Advocate

Edward Hearn, Q.C. Counsel to the Town of Labrador City **IN THE MATTER OF** the *Public Utilities Ac*t, (R.S.N. 1990, Chapter P-47 (the "Act"), and

IN THE MATTER OF a General Rate Application (the "Application") by Newfoundland and Labrador Hydro for approvals of, under Section 70 of the Act, changes in the rates to be charged for the supply of power and energy to Newfoundland Power, Rural Customers and Industrial Customers; and under Section 71 of the Act, changes in the Rules and Regulations applicable to the supply of electricity to Rural Customers.

Brief of Argument of Newfoundland Power

Ian Kelly, Q.C. and Brock Myles Counsel to Newfoundland Power Inc.

January 12, 2004

2003 Hydro General Rate Application Brief of Argument Table of Contents

A.	INTR	RODUCTION	A-1
B.	REV	ENUE REQUIREMENT	B-1
	B.1	General	B-1
	B.2	Depreciation Expense	B-1
	B.3	Fuel	В-З
		B.3.1 General	В-З
		B.3.2 Test Year Price of No. 6 Fuel	B-5
		B.3.3 Hydraulic Forecasting Methodology	B-6
		B.3.4 Conversion Factor at Holyrood	B-9
		B.3.5 Diesel Fuel Price	B-15
		B.3.6 Conclusion	B-15
	B.4	Power Purchased	B-16
	B.5	Other Costs	B-17
		B.5.1 Productivity Initiatives	B-17
		B.5.1.1 J.D. Edwards System	B-17
		B.5.1.2 Positions Eliminated in 2002	B-18
		B.5.1.3 Business Process Improvements	B-19
		B.5.2 Salary and Fringe Benefits	B-21
		B.5.2.1 General	B-21
		B.5.2.2 Forecast Staffing Levels	B-22
		B.5.2.3 Salaries	B-23
		a) Forecast Wage Increase for 2004	B-23
		b) Positions Eliminated in 2003	B-24
		B.5.2.4 Vacancy and Productivity Allowances	B-2/
		a) Normal Vacancy Allowance	B-28
		b) Productivity Allowance	B-29
		B.5.3 Hydro Capitalized Expenses	B-33
		B.5.4 Transportation Costs	B-35
		B.5.4.1 Venicle Costs	B-36
		B.5.4.2 Aircraft Usage	B-38
		B.5.5 Loss on Disposal of Capital Assets – Davis Inlet	B-39
		B.5.6 MISCEllaneous Costs	B-41
		B.5.0.1 Travel and Training	B-41
		D.D.D.2 IIIVEIIIOIY WIILE-OIIS	B-42
	De		B-43
	D.0	Summer	В-44

2003 Hydro General Rate Application Brief of Argument Table of Contents

C.	RETU	JRN ON RATE BASE	C-1
	C.1	General	C-1
	C.2	Rate Base	C-1
	C.3	Return on Rate Base	C-2
		C.3.1 Cost of Debt	C-2
		C.3.1.1 Short-Term Interest	C-3
		C.3.2 Cost of Equity	C-6
		C.3.2.1 Introduction	C-6
		C.3.2.2 Order No. P.U. 7 (2002-2003)	C-7
		C.3.2.3 Basis of Regulation	C-8
		C.3.3 Capital Attraction and Creditworthiness	C-9
		C.3.4 Capital Structure and Dividend Policy	C-9
		C.3.5 The Debt Guarantee	C-14
		C.3.6 Social Policy Benefits	C-15
		C.3.7 Submission with Respect to Hydro's ROE	C-16
		C.3.8 Range of Rate of Return, Excess Earnings Account and	
		Automatic Adjustment Formula	C-19
	C.4	Summary	C-21
_			
D.	COS	F OF SERVICE	D-1
	D.1	Plant Assignments on the Island Interconnected System	D-1
		D.1.1 General	D-1
		D.1.2 Assignment of Generation Assets	D-3
		D.1.3 Assignment of Transmission Assets	D-4
		D.1.3.1 Assignment of the GNP and Doyles-Port aux Base	ques
		I ransmission Assets	D-5
		D.1.3.2 Assignment of the Burin Transmission Assets	D-6
	D.2		D-8
		D.2.1 General	D-8
		D.2.2 Position of Parties	D-10
	D.3	Review of Test Year Load Forecasts	D-15
F	WHO	I FSALE RATE STRUCTURE	F-1
	F 1	General	F-1
	E.2	Characteristics of the Island Interconnected System	E-2
	-	E.2.1 System Planning and System Expansion	E-3
		E.2.2 System Marginal Costs	E-5
		E.2.2.1 Short-run Marginal Costs	E-6
		E.2.2.2 Long-run Marginal Costs	E-6
			•

Page

2003 Hydro General Rate Application Brief of Argument Table of Contents

Page

E.3	The Energy-Only Wholesale Rate E.3.1 Impact on System Expansion E.3.2 Collection of Revenue Requirement E.3.3 Fairness	E-8 E-8 E-9 E-10
	E.3.4 Efficiency in System Operations	E-11
	E.3.5 Proper Price Signals to Customers	E-12
	E.3.5.1 The Price Signal to Retail Customers	E-12
	E.3.5.2 The Price Signal to Newfoundland Power	
	E.3.6 Cost Effective Demand Side Management	E-15
	E.3.7 Rate and Revenue Stability	E-10
	2.3.6 Summary on the Evaluation of the Energy-Only Wholesale Pate	⊑ 18
F4	Proposal to Move from the Energy-Only Rate Structure	E-10
L.7	F 4 1 Basis for the Proposed Sample Rate	E-19
	E 4.2 Evaluation of the Sample Rate	F-21
	E.4.2.1 Send a Correct Price Signal to All Parties	E-21
	E.4.2.2 The Maintenance of Revenue Stability	E-26
	E.4.2.3 Provide Newfoundland Power an Incentive to	
	Minimize the Island Peak through Use of Generation,	
	Rates or other Cost Effective Means	E-31
	E.4.2.4 Rationalize the Rate Approach with the Treatment of	
	Newfoundland Power's Generation in the Cost of	
	Service Study	E-31
	E.4.2.5 Summary of the Evaluation of the Sample Rate	E-33
E.5	EES Wholesale Demand/Energy Rate Design	E-35
E.6	Implementation Issues with a Demand/Energy Wholesale Rate	E-36
	E.6.1 Demand/Energy Rate Design	E-36
	E.6.2 Weather Normalization of Demand	E-37
	E.6.3 Revenue Neutrality	E-38
Г 7	E.6.4 Reserve Mechanism	E-39
E./	Conclusion	E-42
		F_1
F 1	Managing the Rural Deficit	1
	F.1.1 General	F-1
	F.1.2 Minimizing the Rural Deficit	F-2
	F.1.3 Contributors to Rural Deficit Growth	F-3
	F.1.4 Monitoring the Rural Deficit	F-5
CONC	CLUSION	. G-1

F.

G.

1 A. INTRODUCTION

2	The Application before the Board under sections 70 and 71 of the Public Utilities Act is
3	Hydro's second general rate application as a fully regulated utility.
4	
5	As revised, Hydro's Application seeks increases effective January 1, 2004 sufficient to
6	recover an additional \$36.6 million in rates. Hydro proposes that approximately \$27.3
7	million of this increase be recovered from Newfoundland Power's 220,000 island
8	customers. This translates into a base rate increase of approximately 12.0% to
9	Newfoundland Power, and a price increase to Newfoundland Power's customers of
10	approximately 6.5%.
11	
12	Further, the operation of the new Rate Stabilization Plan will result in Newfoundland
13	Power's customers bearing a further estimated price increase of approximately 3.1% on
14	July 1, 2004.
15	
16	If approved, the result to Newfoundland Power's customers is an overall rate increase in
17	the year 2004 of approximately 9.9%.
18	
19	Hydro states that its Application (and its request for an additional \$36.6 million in rates)
20	is focused to a large extent on the recovery of the cost of new sources of electricity
21	supply. However, Hydro's controllable expenses have continued to increase.
22	Opportunities remain for the achievement of cost reduction through additional
23	productivity and efficiency gains.

A-1

It is also significant that Hydro is proposing that its rates be set on the basis of a return
 on equity of 9.75% instead of the 3.0% return on equity approved in 2002.

3

In its last general rate order respecting Hydro, the Board observed that Hydro did not
have the characteristics of an investor owned utility and that there was no basis for
regulating Hydro as an investor owned utility. In the intervening period, the factors
identified by the Board as being relevant to that determination have either not changed
or have deteriorated. In this hearing, the Board will also have to consider whether
Hydro has a sound financial plan for its operation as a Crown owned utility.

10

In addition to addressing Hydro's cost of capital, Newfoundland Power's Brief of
 Argument makes specific recommendations to the Board relative to operating expenses
 and rate issues, including the proposed change to the wholesale rate structure.

14

This Application involves the regulatory oversight of the cost of providing service to Hydro's customers. It requires the balancing of the competing interests of consumers and investors through the application of regulatory principles for a utility that has not yet achieved all of the generally accepted hallmarks of a fully regulated utility under the applicable legislation.

20

Newfoundland Power submits that these considerations necessitate moderation and a
 balanced approach to the regulation of Hydro's rates over the near term.

A-2

В. 1 **REVENUE REQUIREMENT**

2 **B.1** General

Hydro's proposed 2004 revenue requirement is summarized in Table B-1 below: 3

4

Table B-1 Revenue Requirement 2004 Test Year ¹ (\$000)		
Depreciation	33,672	
Fuel	91,744	
Power Purchased	33,594	
Other Costs	91,661	
Interest Expense	98,165	
Return on Equity	18,674	
Revenue Requirement	367,510	

¹ Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2nd Revision, p. 1 of 8, column f

9 In this section of its brief, Newfoundland Power deals with depreciation, fuel, power

10 purchased and other costs. Interest expense is addressed in section C Return on Rate

11 Base, in the context of Hydro's cost of debt. Return on equity is also addressed in

12 section C Return on Rate Base.

13

14 **B.2 Depreciation Expense**

15 Hydro's 2004 test year depreciation expense is largely uncontested in this hearing.

16 However, a reduction in capital expenditures reduces depreciation expense in the test

17 year.

- 1 Reference: Grant Thornton Financial Consultants Report, p. 18, lines 1-8 2 3 Grant Thornton's prefiled evidence states that actual capital expenditures by Hydro from 4 1998 through 2002 have been on average approximately 14% lower than budget. Its 5 evidence goes on to say that the Board should consider the historical experience with 6 respect to Hydro's capital expenditures and assess whether an adjustment to its 2004 7 revenue requirement is appropriate. A 14% downward adjustment to Hydro's 2003 and 8 2004 forecast capital expenditures would result in a reduction in depreciation expense 9 of \$85,000 and \$169,000 respectively. 10 11 Reference: Grant Thornton Financial Consultants Report, p. 17, lines 3-6, p. 18, lines 1-8 and p. 19, lines 1-4 12 13 Transcript - Brushett, December 11, 2003, p. 12, line 2 to p. 13, line 22 14 15 16 17 Mr. Wells stated that Hydro is aware that there is an issue with respect to under 18 spending on capital expenditures and that Hydro has not yet taken a policy position on this matter. Hydro confirms that no adjustment to its October 31st revised evidence has 19 20 been made with respect to the potential under spending of its capital budget. 21 22 Reference: Transcript - Wells, October 7, 2003, p. 119, line 16 to p. 120, 23 line 25 **NP-306 NLH** 24 25 26 Newfoundland Power submits that an allowance of 14% be applied to 2003 and 27 2004 forecast capital expenditures for determination of revenue requirement, as
 - B-2

1	sugge	ested by Grai	nt Thornton. Based on the evidence of Grant Thornton, the
2	Board	l should ther	efore order a reduction of \$169,000 in Hydro's 2004 test year
3	depre	ciation expe	nse.
4			
5	Grant	Thornton also	suggests a similar adjustment to 2004 depreciation expense based
6	on an	analysis of fo	recast plant retirements. Hydro indicates that the impact of
7	increa	sing plant reti	rements, as suggested by Grant Thornton, will be offset by potential
8	losses	s on disposal.	Mr. Brushett indicates that Hydro's subsequent estimate on losses
9	on dis	posal is high.	The evidence on this issue is unclear.
10			
11 12 13 14 15 16 17 18 19		Reference:	Grant Thornton Financial Consultants Report, p. 18, lines 31-39 and p. 19, lines 1-4 Transcript - Brushett, December 11, 2003, p. 12, line 2 to p. 13, line 22 NP-306 NLH Transcript - Roberts, November 12, 2003, p. 48, line 9 to p. 51, line 23 Transcript - Brushett, December 11, p. 20, line 14 to p. 21, line 17
20			
21	B.3	Fuel	
22	B.3.1	General	
23	Hydro	's fuel cost is	principally made up of No. 6 fuel burned at Holyrood. Diesel fuel,
24	which	for the most p	part is used in Hydro's isolated diesel generators, is the other
25	materi	ial component	t of Hydro's annual fuel costs.

1	Hydro's test year 2004 forecast for the cost of No. 6 fuel to be embedded in rates is		
2	approximately \$84.2 million. This is approximately a \$3.0 million increase in the No. 6		
3	fuel cost currently embedded in rates.		
4			
5 6 7 8 9 10	Reference: Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2 nd Revision, p. 1 of 8, column b, line 5 Finance and Corporate Services Evidence, Roberts, Schedule II, 1 st Revision, column b, line 5		
11	Hydro's cost of No. 6 fuel in the test year is primarily dependent upon 3 factors. The		
12	primary factor is the actual price of fuel itself. Hydro is proposing a forecast average		
13	purchase price for No. 6 fuel for 2004 of \$28.95/bbl. (compared to a forecast average		
14	purchase price of \$25.91/bbl. for the 2002 test year). This will result in base rates		
15	reflecting fuel cost of \$29.50/bbl. (representing a blended price of year-end 2003		
16	inventory at cost and forecast 2004 purchases at \$28.95/bbl.)		
17			
18 19 20 21 22 23 24	Reference: Production Evidence, Haynes, Schedule VIII, 1 st Revision Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2 nd Revision, p. 8 of 8, and p. 5 of 8, lines 7-9 Order No. P.U. 7 (2002-2003), Summary of Board Decisions, p. 166, Item #13		
25	The second factor that affects Hydro's annual cost of No. 6 fuel is the volume of fuel		
26	actually consumed, which is a function of the annual production of Hydro's hydraulic		
27	plants. Island Interconnected System production is predominantly hydraulic and has		
28	very low variable costs. Holyrood production, which has a much higher variable cost, is		
29	used to the extent necessary to meet system load not capable of being served by		

1	hydraulic production. For this reason, the forecast of hydraulic production for the test
2	year can have a significant impact on Hydro's revenue requirement. A relatively low
3	hydraulic production forecast means that a greater proportion of system energy needs
4	will be met in the test year by more expensive thermal production at Holyrood.
5	
6	The third factor that affects the annual cost of No. 6 fuel is the conversion or efficiency
7	factor for production at Holyrood. This is typically expressed in kWh/bbl and reflects
8	forecast efficiency at the generating plant. Hydro is proposing to use a conversion
9	factor of 624 kWh/bbl for Holyrood production for the 2004 test year.
10	
11	Hydro's forecast of diesel fuel price is the only other material issue related to Hydro's
12	test year fuel costs.
13	
14	Reference: Production Evidence, Haynes, p.13, lines 6-16.
15	
16	B.3.2 Test Year Price of No. 6 Fuel
17	Hydro's proposed test year price of fuel is determined based on the information
18	provided by an external consultant, PIRA Energy Group of New York. PIRA's forecast
19	is provided in \$US. Hydro uses an average forecast \$US/\$CDN exchange rate for 2004
20	based on information provided by several financial institutions. Hydro's test year No. 6
21	fuel price forecast is based on purchasing fuel with 2.2% sulphur content.
22	
23 24	Reference: NP-290 NLH Production Evidence, Haynes, pp. 21-24

1	Newfoundland Power submits that Hydro's forecast price of No. 6 fuel for the
2	2004 test year is reasonable.
3 4 5	B.3.3 Hydraulic Forecasting Methodology
6	Hydro's Application reflects an estimate of hydraulic production for the test year 2004 of
7	4,582 GWh in Annual Average Energy. Hydro has based this estimate on the 30-year
8	average of hydrology records.
9	
10	In Order No. P.U. 7 (2002-2003) the Board ordered Hydro to use the 30-year average
11	annual hydraulic production of 4,425 GWh as the basis for its 2002 test year hydraulic
12	forecast. The Board also ordered Hydro to commission an independent study into its
13	current forecasting methodology to address concerns raised during Hydro's 2001 GRA,
14	including the issues of data reliability, long term trends and climate change.
15 16 17	Reference: Order No. P.U. 7 (2002-2003), p. 165, section II.6 Production Evidence, Haynes, Table 7, p. 30
18	
19	The appropriate data stream to be used by Hydro in forecasting hydraulic production
20	was addressed in the mediation report dated October 3, 2003 and filed with the Board
21	as Consent No. 1. In this report all Parties agreed that the 30-year record is most
22	appropriate at this time, and that the Board may consider using the full historic hydraulic
23	record in Hydro's next GRA only after Hydro addresses discrepancies identified in the
24	Acres Island Study and the Parties have had an opportunity to comment thereon.

1 Reference: Consent No. 1, p. 3, item r 2 3 If Hydro were to use the full historic hydraulic record to forecast production from its 4 hydroelectric plants, it would result in a hydraulic production forecast of 4,458 GWh. 5 Applying this forecast to the 2004 test year would increase the No. 6 fuel expense by 6 \$5.97 million. This would result in an additional rate increase of 2.1% for Newfoundland 7 Power and 2.7% for the Industrial Customers. 8 9 Reference: Production Evidence, Haynes, p. 30, lines 1-5 10 11 The five most significant recommendations made in the Acres Island Study are: 12 1. The longest reliable reference inflow sequence (period of record) should be used 13 for all Hydro's operation planning and rate setting purposes. 14 2. The inflow sequences presently used by Hydro should be corrected to ensure 15 internal consistency. 16 3. The same estimate of Average Annual Energy from hydroelectric resources 17 should be used for operations, planning and rate setting. 18 4. Computer simulation of the operation of the hydroelectric system using the 19 reference inflow sequences should be used to estimate energy production and 20 spill from Hydro's hydraulic resources. Hydro should review its in-house models 21 and other models available and select one for these purposes. The above-noted 22 corrections to the inflow sequences should be completed prior to simulating 23 operations under this model. Since system simulation models usually require a

1	common start date for all inflow sequences, data from the early years of some
2	inflow sequences will have to be cut off.
3	5. Recognizing that rectification of the inflow sequences and selection of a
4	computer model will require some time, Hydro should continue to use its present
5	inflow sequences and methodology for energy estimates. The present records,
6	even with minor inconsistencies, will give better estimates of expected flow than
7	shorter records.
8	
9	Reference: Production Evidence, Haynes, p. 28, line 24 to p. 29, line 18
10	
11	Hydro has indicated that it will be correcting internal data inconsistencies and will also
12	be investigating possible simulation models so that, if approved by the Board, the
13	results of the simulation will be available to be used as the hydraulic production forecast
14	in subsequent rate applications.
15	
16	Reference: Production Evidence, Haynes, p. 29, lines 20-24
17	
18	Newfoundland Power submits that the 30-year record continue to be used as the
19	appropriate hydraulic data stream for both hydraulic production projections and
20	RSP calculations. This is consistent with Hydro's application and the negotiated
21	settlement agreed upon by all Parties in this proceeding.

1	Newfoundland Power also submits that the analysis in support of using a longer-
2	term average for forecasting hydraulic production is not yet complete. Hydro
3	should be requested to file this analysis for consideration upon completion. The
4	Board should not make any determination as to the appropriate period of record
5	for use in determining the Average Annual Energy for future hearings until Hydro
6	has completed the required analysis and presented the results for review at a
7	public hearing.
8	
9	B.3.4 Conversion Factor at Holyrood
10	Hydro is forecasting to use approximately 2.9 million barrels of No. 6 fuel during 2004 to
11	generate electricity at Holyrood. The average kWh output from the use of a barrel of oil
12	depends on the efficiency at the generating plant.
13	
14	Fuel conversion factor is a measure of how efficiently oil is converted to electricity in a
15	thermal plant and directly impacts the number of barrels of oil required in the production
16	of thermal energy.
17	
18 19	Reference: Production Evidence, Haynes, Schedule VII, 1 st Revision Information Exhibit I-4, September 3, 2003, p. 7
20	
21	The fuel conversion factor at Holyrood directly impacts Hydro's fuel expense, as well as
22	Hydro's earnings and charges to the Rate Stabilization Plan.

An analysis of 2002 fuel consumption at Holyrood clearly demonstrates the impact of variations in the fuel conversion factor. At Hydro's 2001 GRA, the Board approved a fuel conversion factor of 615 kWh/bbl. In 2002 an actual fuel conversion factor of 648 kWh/bbl was achieved, resulting in a reduction in fuel costs of \$6.1 million. Of the \$6.1 million, approximately \$3.7 million improved Hydro's earnings and \$2.5 million was a saving to the Rate Stabilization Plan.

- 7
- 8 9

Reference: IC-207 NLH Transcript - Roberts, October 16, 2003, p. 111, lines 6-16

10

11 Schedule V of the Production Evidence clearly indicates that higher average monthly 12 unit loading vields a higher energy conversion factor. As shown in NP – 74 NLH, during 13 the 1996 – 2002 period the fuel conversion factor ranged from a low of 577.1 kWh/bbl in 14 1999 to a high of 648.5 kWh/bbl in 2002. This increase in the fuel conversion factor is 15 directly related to an increase in the net energy produced. Over the 1996 – 2002 period 16 the weighted average conversion factor was 623.7 kWh/bbl. This calculation is the 17 foundation of Hydro's proposal for a fuel conversion factor of 624 kWh/bbl for 2004. It is 18 important to note that during this period average net energy produced at Holyrood was 19 1,510.285 GWh.

1

Table B-2 NP-74 NLH Holyrood Conversion Factor (1996 to 2002)				
Net EnergyNo. 6 FuelConversionProducedConsumedFactorYear(GWh)(Barrels)(kWh/bbl)				
1996 1997 1998 1999 2000 2001 2001 2002	$\begin{array}{c} 1,403.596\\ 1,531.301\\ 1,263.264\\ 919.802\\ 970.283\\ 2,098.490\\ 2,385.262\end{array}$	2,297,258 2,432,538 2,041,605 1,593,932 1,591,586 3,315,853 3,678,183	611.0 629.5 618.8 577.1 609.6 632.9 648.5	
Total Average 1996 - 2002	10,571.998 1,510.285	16,950,955 2,421,565	623.7	

2

3

Mr. Brushett testified that the 2004 "conversion factor should reflect the best estimate of
what the operating conditions will be in 2004."

6

7 Reference: Transcript - Brushett, December 11, 2003, p. 55, lines 11-15

8

9 For 2004 Hydro is forecasting thermal production at Holyrood of 1,790.150 GWh or

- 10 18.5% higher than the average over the 1996 2002 period. Therefore, given the
- 11 forecast operating conditions in 2004 the fuel conversion factor appears conservative.

- Reference: Production Evidence, Haynes, Schedule VII
- 2

1

A closer examination of the data contained in NP-74 NLH for 1997 and 2001 indicates average net energy produced of 1,814.896 GWh with a fuel conversion factor of 631.4 KWh/bbl. (See table B-3 below). In 2004 net energy produced is forecast to be similar to the average for 1997 and 2001, at 1,790.150 GWh. Given the similar operating conditions, a fuel conversion factor of 631 kWh/bbl would be more appropriate.

8

	Table E Holyrood Conve Average of 199	3-3 rsion Factor 7 and 2001	
Year	Net Energy	No. 6 Fuel	Conversion
	Produced	Consumed	Factor
	(GWh)	(Barrels)	(kWh/bbl)
1997	1,531.301	2,432,538	629.5
2001	2,098.490	3,315,853	632.9
Average	1,814.896	2,874,196	631.4

9

10

11 Mr. Brushett indicated that in recent history the fuel conversion factor has been much

12 higher than 624 kWh/bbl due to operating conditions and improvements in plant

13 efficiency at Holyrood. As a result, recent experience is more relevant in determining

14 the fuel conversion factor.

1 2 3 4 5	Reference:	Transcript - Brushett, December 11, 2003, p. 56, lines 14-19 Transcript - Brushett, December 11, 2003, p. 137, line 21 to p. 138, line 11
6	The fuel conversion	factor was 632.9 kWh/bbl in 2001, 648.5 kWh/bbl in 2002 and
7	636.2 kWh/bbl year	to date November 2003.
8		
9 10	Reference:	NP-74 NLH NP-310 NLH
11		
12	The conversion fact	tor is influenced by the operating unit, load level, unit fouling, fuel
13	consumption measu	urements, heat content of the fuel and ambient conditions. These
14	are the same comm	non factors that vary from year to year and have impacted the fuel
15	conversion factor si	nce 1996.
16		
17 18	Reference:	IC-317 NLH Transcript - Haynes, October 24, 2003, p. 79, line 9 to p. 80, line 6
19		
20	The fuel conversion	factor is also influenced by efficiency initiatives such as the
21	controllable loss pro	ogram (ETAPRO) that was installed in 1995.
22		
23	Reference:	Production Evidence, Haynes, p. 12, lines 21-24
24		
25	Plant efficiency initia	atives within the last five years will positively impact fuel efficiency at
26	Holyrood. The insta	allation of a water lance on Unit No. 3 in 2000 and the retubing of

1	Unit No. 3 reheater in 2001 are estimated to improve boiler efficiency by approximately
2	1%, or fuel conversion factor by approximately 2 kWh/bbl. These initiatives would only
3	have impacted the fuel conversion factor after their completion in 2000 and 2001.
4	
5 6 7 8	Reference: IC-199 NLH IC-252 NLH
9	The Continuous Emissions Monitoring System at Holyrood completed in late 2003 is
10	anticipated to result in a further increase in plant efficiency of 3 kWh/bbl.
11	
12 13 14 15 16	Reference: IC-252 NLH NP-89 NLH Grant Thornton Financial Consultant's Report, p. 32, lines 31 – 33
17	Combined these initiatives will result in an increase in plant efficiency of approximately 5
18	kWh/bbl going forward. These efficiency improvements have not been substantially
19	included in Hydro's proposed fuel conversion factor of 624 kWh/bbl for 2004. Mr.
20	Brushett supports the position that improvements to plant efficiency should be reflected
21	in the fuel conversion factor on a go forward basis.
22	
23	Reference: Transcript - Brushett, December 11, 2003, p. 137, lines 9-20
24	
25	Given the forecast operating conditions, the initiatives to improve plant efficiency
26	and recent experience, it is Newfoundland Power's position that a fuel conversion
27	factor of 636 kWh/bbl (631 + 5) is more appropriate for 2004. If the Board accepts

1	this position, Hydro's 2004 fuel expense will be reduced by approximately \$1.6
2	million.
3	
4	Reference: NP-269 GT, page 2 of 2, lines 1-8
5	
6	B.3.5 Diesel Fuel Price
7	Hydro's Application reflects test year diesel fuel costs of approximately \$6,801,000.
8	This compares to approximately \$6,508,000 currently embedded in rates.
9	
10 11	Reference: Finance and Corporate Services Evidence, Roberts, Schedule II Column b, line 10
12	
13	Newfoundland Power submits that Hydro's forecast of diesel fuel price for the
14	2004 test year is reasonable.
15	
16	B.3.6 Conclusion
17	1) The Board should accept Hydro's proposal to use a purchase price for No.
18	6 fuel of \$28.95/bbl. for the 2004 test year as reasonable.
19	2) The Board should accept the use of a 30-year record for determining the
20	Average Annual Energy for 2004 as agreed in the negotiated settlement.
21	3) The Board should not make any determination as to the appropriate period
22	of record for use in determining the Average Annual Energy for future
23	hearings until Hydro has completed the required analysis and presented
24	the results for review at a public hearing.

1	4) The Board should approve the use of a Holyrood fuel conversion factor of
2	636 kWh/bbl for use in determining 2004 test year fuel costs.
3	
4	5) The Board should accept Hydro's proposed diesel costs for the 2004 test
5	year as reasonable.
6	
7	B.4 Power Purchased
8	Power and energy is provided by Hydro through a mix of hydraulic and thermal
9	generation, supplemented by power purchased under long-term contracts with non-
10	utility generators (NUGS). These power purchase arrangements, and the recovery of
11	these costs by Hydro through rates, are the subject matter of Exemption Orders from
12	the Lieutenant-Governor in Council issued under the Public Utilities Act and the
13	Electrical Power Control Act, 1994. In 2003 and 2004, Hydro will be required to
14	purchase increased energy from NUGS under these long-term contracts.
15	
16 17 18 19 20	Reference: Production Evidence, Haynes, p. 5 lines 11-14 Production Evidence, Haynes, p. 7, lines 1-10 Production Evidence, Haynes, Schedule II Production Evidence, Haynes, Schedule X, 1 st Revision IC-69 NLH
21	
22	Newfoundland Power submits that Exemption Orders from the Lieutenant-
23	Governor in Council issued under the Public Utilities Act and the Electrical Power
24	Control Act, 1994 entitle Hydro to recover the cost of power purchased under
25	long term contracts with non-utility generators.

1 **B.5 Other Costs** 2 From 1997 to forecast 2004, Hydro's gross controllable costs have risen 21.2%. Hydro's net controllable costs have risen 26.7%. These are substantial increases over 3 4 that period. 5 6 References: Transcript - Roberts, October 14, 2003, p. 82, lines 1-21 CA-44 NLH 7 8 9 Hydro has proposed other 2004 test year costs of \$91.7 million. Although this 10 represents an increase of only 0.6% over 2002 actual, the increase over 2002 final test 11 year costs is approximately \$6.0 million or 7%. 12 13 Finance and Corporate Services Evidence, Roberts, Schedule II, Reference: 1^{st} Revision, columns b and c, lines 14-33 14 Finance and Corporate Services Supplementary Evidence, Roberts. 15 Schedule II, 2nd Revision, page 1 of 8, column f, lines 14-32 16 17 18 19 **B.5.1** Productivity Initiatives 20 B.5.1.1 J.D. Edwards System 21 In 1998-1999, Hydro purchased and installed its J. D. Edwards computer software 22 system, at a net cost to Hydro's regulated operations of \$10.8 million. 23 Transcript - Roberts, October 14, 2003, p. 83, line 16 to p. 84, 24 Reference: 25 line 11

1	After three years of experience, the benefits to be derived from the J. D. Edwards
2	System have not yet been fully achieved. Nevertheless, the J.D. Edwards System now
3	gives management the ability to have real time, on-line information with respect to
4	operations.
5	
6 7 8 9	Reference: Transcript - Wells, October 7, 2003, p. 95, line 6 to p. 97, line 19 Transcript - Roberts, October 14, 2003, p. 84, line 3 to p. 88, line 23
10	Newfoundland Power submits that Hydro can achieve greater efficiencies and
11	productivity improvements. Opportunities exist for Hydro to reorganize, leverage
12	technology and manage its operations to further reduce costs. Newfoundland
13	Power believes that Hydro should continue to have a strong incentive to seek
14	productivity and efficiency gains.
15	
16	B.5.1.2 Positions Eliminated in 2002
17	In 2002 Hydro had a net workforce reduction of 46 positions. This resulted in severance
18	costs of \$1.4 million in 2002. Hydro has testified that resulting salary savings in 2004
19	from the elimination of these 46 positions are forecast at approximately \$2.6 million.
20	
21 22 23	Reference: Finance and Corporate Services Evidence, Roberts, p. 7, lines 1-16 Information Exhibit I-11

1 **B.5.1.3 Business Process Improvements**

2	Mr. Wells described Hydro's Business Process Improvement Project stating that Hydro
3	had not informed the Board at the 2001 GRA that this project had been initiated.
4	
5 6 7 8	Reference: Transcript - Wells, October 7, 2003, p. 70, line 23 to p. 95, line 5 Transcript - Wells, October 10, 2003, p. 117, line 2 to p. 130, line 12
9	Expenditures by Hydro in 2002 with respect to this project totalled \$1.8 million, of which
10	\$1.0 million was for external consultants. Additional internal salary costs of \$1.0 million
11	have been assigned to this project as of September 30, 2003, bringing the total
12	expenditures to date to \$2.8 million.
13	
14 15 16	Reference: CA-46 NLH Transcript - Roberts, October 14, 2003, p. 88, line 24 to p. 89, line 25 Transcript - Roberts, October 15, 2003, p. 9, line 21 to p. 10, line 12
17	
18	Under the project, Hydro has completed reviews with respect to three internal business
19	processes: (i) accounts payable, (ii) corporate purchasing card and travel, and (iii)
20	consumables and inventory. Savings from these reviews are estimated at \$600,000
21	annually. Additional meter reading improvements are anticipated to result in further
22	savings of \$128,000 (labour savings of \$100,000 and travel expense savings of
23	\$28,000). This results in a total salary savings of \$700,000.

1 2 3 4 5 6	Reference:	Finance and Corporate Services Evidence, Roberts, p. 23, line 12 to p. 24, line 13 Transcript - Roberts, October 14, 2003, p. 105, line 8, to p. 106, line 9 Transcript - Roberts, October 15, 2003, p. 10, line 13 to p. 11, line 2
7	Mr. Roberts indicate	ed that further opportunities exist within Hydro to leverage
8	technology and reo	rganize in order to increase efficiency. However, Mr. Roberts
9	acknowledged that:	
10	Hydro cu	rrently has the same number of departments (19) and business units
11	(150) as	t did in 1997;
12	Hydro ha	s no plans for corporate reorganization even though approximately
13	25% of its	s workforce will be eligible to retire over the next 5 years;
14	Hydro ha	s no plans to pro-actively reduce the number of FTEs;
15	Hydro ha	s no FTE targets for 2004, let alone targets for the longer term;
16	The struct	ture of Hydro is being dictated by the results of the various process
17	reviews;	
18	Staff redu	uctions are generally only done on a position-by-position basis, as
19	they beco	ome vacant; and
20	The pote	ntial for FTE reductions due to the 3 ongoing organizational process
21	reviews o	outlined at page 24 of the Finance and Corporate Services Evidence
22	has not y	et been quantified.

1 2 3 4 5 6 7 8 9	Reference: Transcript - Roberts, October 14, 2003, p. 70, line 24, to p. 72, line 1 p. 111, line 21 to p. 112, line 21 p. 113, line 25 to p. 118, line 8 p. 126, lines 2-22 CA-10 NLH PUB-80 NLH PUB-81 NLH PUB-104 NLH
10	
11	Hydro has placed significant emphasis on business process improvement since
12	2002. Limited productivity gains have been realized as a result. However, the
13	evidence suggests that additional productivity gains are possible given what ha
14	been expended to date, the limited gains achieved to date, the limited number of
15	processes reviewed to date, the on-going and continuous nature of this initiative
16	and the potential for other changes within Hydro aimed at improving overall
17	performance and reducing costs.
18	
19	B.5.2 Salary and Fringe Benefits
20	B.5.2.1 General
21	Salary and Fringe Benefits comprise approximately 63% of Hydro's controllable
22	operating costs for 2004.
23	
24	Reference: Corporate Overview Evidence, Wells, p. 7, lines 13-14

1 Hydro's response to Request for Information NP-304 NLH provided a breakdown of

2 2002, 2003 and test year 2004 salary and fringe benefits based on the October 31,

3 2003 revised filing. This information is summarized in Table B-4 below.

- 4
- 5

Salary aı 2002 -	Table B-4 nd Fringe Be · Test Year 2((\$000)	nefits 004	
	2002 Actuals	2003 Forecast	2004 Test Year
Salaries	50 323	18 712	10.025
Directors Fees	23	62	49,923
Overtime	3,910	3,863	2,869
Employee Future Benefits	2,445	3,631	3,727
Fringe Benefits	6,630	6,944	7,110
Group Insurance	1,123	1,600	1,950
Labrador Travel Benefit	105	97	99
Vacancy Allowance	0	(220)	(2,500)
	64,559	64,689	63,242

6

7

8 **B.5.2.2** Forecast Staffing Levels

9 Hydro's 2004 test year salaries (\$49,925,000) continue to be based on full complement

as of August 2003 as opposed to forecast full time equivalents (FTEs). Mr. Roberts

11 testified that Hydro recognizes that there will be vacancies and staff reductions during

12 the year by applying a vacancy credit (\$2,500,000) that reduces the total forecast for

13 salaries and fringe benefits.

1 2 3	Reference:	Transcript - Roberts, October 14, 2003, p. 112, line 22 to p. 113, line 14 IC-39 NLH, p. 2 of 3, footnote 2
4		
5	Hydro's continued pr	ractice of forecasting based on staff complement versus FTEs
6	makes the evidence	unclear as to real test year staffing requirements, and causes
7	confusion with respe	ect to how test year salary and fringe benefits have been
8	determined.	
9		
10 11	Reference:	Transcript - Haynes, October 24, 2003, p. 61, line 11 to p. 67, line 15
12		Transcript - Haynes, October 24, 2003, p. 81, line 20 to p. 84, line 3
13		
14	B.5.2.3 Salaries	
15	Table B-4 above sho	ows 2004 test year salaries in the amount of \$49,925,000.
16		
17	Hydro attributes the	change in salaries expense from 2002 to test year 2004 to two
18	offsetting factors: an	nual savings of \$2.6 million from the elimination of 46 positions in
19	2002, offset by 2003	and 2004 wage increases.
20		
21 22 23 24	Reference:	NP-243 NLH (Note 1) Grant Thornton Financial Consultants Report, p. 38, lines 16-21
25	a) Forecast Wage	Increase for 2004
26	Mr. Wells testified th	at Hydro has concluded a collective agreement that provides for a
27	3% bargaining unit w	vage increase effective April 1, 2004. Hydro also indicated that test

1	year 2004 salary co	osts have been forecast based on existing wage rates increased by
2	\$1.2 million, or 3%	effective January 1, 2004. Mr. Roberts stated that using an effective
3	date of January 1,	2004 as opposed to April 1, 2004 was done for simplicity in terms of
4	preparing the 2004	budget.
5		
6 7 8 9 10	Reference:	Transcript - Wells, October 9, 2003, p. 130, lines 6-10 NP-304 NLH (Note 9) CA-41 NLH Transcript - Roberts, October 15, 2003, p. 52, line 15 to p. 53, line 7 NP-14 NLH
11		
12	Newfoundland Po	wer submits that 2004 test year salary costs should be reduced
13	by \$300,000 (\$1.2	million/12 x 3) to more appropriately reflect the April 1, 2004
14	effective date for	bargaining unit wage increases.
15		
15 16	b) Positions Elim	inated in 2003
15 16 17	<i>b) Positions Elim</i> Hydro's forecast sa	<i>inated in 2003</i> alaries for test year 2004 (\$49,925,000) should reflect \$600,000 in
15 16 17 18	 b) Positions Elim Hydro's forecast sa savings due to the 	<i>inated in 2003</i> alaries for test year 2004 (\$49,925,000) should reflect \$600,000 in elimination of 10 FTEs in 2003 and \$100,000 in savings related to
15 16 17 18 19	<i>b) Positions Elim</i> Hydro's forecast sa savings due to the changes in the area	<i>inated in 2003</i> Ilaries for test year 2004 (\$49,925,000) should reflect \$600,000 in elimination of 10 FTEs in 2003 and \$100,000 in savings related to a of meter reading, referred to previously in section B.5.1.3.
15 16 17 18 19 20	<i>b) Positions Elim</i> Hydro's forecast sa savings due to the changes in the area	<i>inated in 2003</i> Ilaries for test year 2004 (\$49,925,000) should reflect \$600,000 in elimination of 10 FTEs in 2003 and \$100,000 in savings related to a of meter reading, referred to previously in section B.5.1.3.
 15 16 17 18 19 20 21 22 23 24 25 	b) Positions Elim Hydro's forecast sa savings due to the changes in the area Reference:	inated in 2003 Maries for test year 2004 (\$49,925,000) should reflect \$600,000 in elimination of 10 FTEs in 2003 and \$100,000 in savings related to a of meter reading, referred to previously in section B.5.1.3. NP-278 NLH Transcript - Roberts, October 14, 2003, p. 101, line 21 to p. 107, line 4 Transcript - Roberts, October 15, 2003, p. 10, line 13 to p. 11, line 2
 15 16 17 18 19 20 21 22 23 24 25 26 	 b) Positions Elim Hydro's forecast satisfies savings due to the changes in the area Reference: On October 15, 200 	inated in 2003 Maries for test year 2004 (\$49,925,000) should reflect \$600,000 in elimination of 10 FTEs in 2003 and \$100,000 in savings related to a of meter reading, referred to previously in section B.5.1.3. NP-278 NLH Transcript - Roberts, October 14, 2003, p. 101, line 21 to p. 107, line 4 Transcript - Roberts, October 15, 2003, p. 10, line 13 to p. 11, line 2

1	for the 2004 test year. I-11 was based on evidence with respect to the 46 positions
2	eliminated by Hydro in 2002, severance payments in 2002 and Hydro wage increases
3	for 2003 and 2004.
4	
5	Mr. Roberts indicated during cross-examination that the reconciliation in I-11 should
6	also reflect:
7	1. An add back of \$1.6 million to reflect vacancies for 2002; and,
8	2. A reduction to reflect temporary labour costs eliminated by Hydro since 2002
9	
10	An adjusted reconciliation, based on Mr. Roberts' testimony is provided in Table B-5
11	below:

12

Ta Salaries 2002 Actual (able B5 Reconciliatior vs. 2004 Fore (000's)	n cast
2002 Actuals	\$50,323	
Average of 32 Vacant Positions		
in 2002 at \$50,000 each ¹	\$ 1,600	
	\$51,923	
Severance Payments	-\$ 1,465	
Savings 46 positions	-\$ 2,600	
	\$47,858	(Roberts: \$47,871) ²
Wage Increases (approximately 8%) ¹	<u>\$ 3,800</u> \$51,658	(Roberts: \$51.700) ²
	φ51,050	(100013. \$51,700)
Temporary Labour		0
Eliminated since 2002 ¹	<u>-\$ 1,733</u>	(Roberts: \$1,775) ²
2004 Forecast	<u>\$49,925</u>	

13 14 15

Adjustments to I-11 based on testimony of Mr. Roberts on October 15, 2003.
 Amounts referred to by Mr. Roberts during cross-examination on October 15, 2003.

1 2 3	Reference: Information Item I-11 Transcript - Roberts, October 15, 2003 p. 48, line 24 to p. 51, line 7
4	On October 15 and 16, 2003 Mr. Roberts confirmed that the amount of temporary
5	labour that Hydro has eliminated since 2002 is in the order of \$1.6 million to \$1.7
6	million, and that this reduction is in addition to the savings of \$700,000.00 associated
7	with the elimination of 10 FTEs and meter reading, as referred to above.
8	
9 10	Reference: Transcript - Roberts, October 15, 2003, p. 153, line 4 to p. 158,
10 11 12 13	Transcript – Roberts, October 16, 2003, p. 119, line 22 to p. 120, line 2
14	In updating the reconciliation, however, Mr. Roberts made no mention of the
15	\$700,000.00 in savings already realized. This suggests that these savings are not
16	reflected through a reduction in salaries, but rather are included in Hydro's \$2.5 million
17	vacancy allowance. This was confirmed by Mr. Brushett.
18	
19 20	Reference: Transcript - Brushett, December 11, 2003, p. 101, line 20 to p. 104, line 18
21	
22	Newfoundland Power submits that the salary savings of \$700,000 related to the
23	elimination of 10 FTEs and meter reading changes in 2003 should not form part of
24	Hydro's vacancy allowance. Hydro has not satisfactorily proven that these
25	savings have been reflected in its 2004 test year salaries expense totalling
26	\$49,925,000. The Board should order Hydro to reduce its 2004 test year salaries

1	by \$700,000 to reflect the fact that these positions have already been eliminated
2	from Hydro's workforce in 2003.
3	
4	2004 test year salary costs also do not reflect savings associated with the elimination of
5	cash handling processes in St. Anthony and Wabush. However, the amount of these
6	salary savings has not been provided in evidence.
7	
8 9	Reference: Transcript - Roberts, November 12, 2003, p. 63, line 21 to p. 65, line 13
10	
11	B.5.2.4 Vacancy and Productivity Allowances
12	Hydro has testified that its proposed \$2.5 million vacancy allowance for 2004 consists of
13	\$1.0 million for normal vacancies and \$1.5 million for future staffing reductions resulting
14	from process improvement initiatives.
15	
16 17	Reference: Transcript – Roberts, October 15, 2003, p. 54, line 23 to p. 55, line 12
18	
19	The question therefore becomes twofold:
20	1. What is a normal vacancy allowance for Hydro?
21	2. Does the additional \$1.5 million vacancy allowance proposed by Hydro
22	represent a reasonable target for future staff reductions, and therefore a
23	reasonable productivity allowance for 2004?

1 a) Normal Vacancy Allowance

2 Hydro's normal vacancy allowance for the 2004 test year is calculated as 21/2% of 3 permanent salaries: 4 2 ½% x \$40,000,000 = \$1,000,000 5 6 Reference: Transcript - Roberts, October 15, 2003, p. 56, line 15 to p. 57, line 9 7 8 In its 2001 General Rate Application, Hydro also proposed a \$1.0 million allowance to 9 cover normal vacancies. However, in Order No. P.U. 7 (2002 – 2003) the Board stated: 10 11 "NLH has not convinced the Board that a $2\frac{1}{2}$ % vacancy allowance is adequate and reflects recent experience. The Board finds in the 12 13 circumstances that a vacancy credit in the amount of \$1,500,000 should be used in the test year 2002. This is \$500,000 more than proposed by 14 NLH." 15 16 Reference: Order No. P.U. 7 (2002 – 2003), p. 66 17 18 19 Evidence in this hearing continues to suggest that a \$1.0 million allowance for normal 20 vacancies is inadequate and does not reflect recent experience. Hydro's response to 21 NP-34 NLH indicates that from 1993 through 2001 the normal vacancy rate has 22 averaged approximately 3.5%. Mr. Roberts also testified that Hydro averaged 23 approximately 32 vacancies in 2002 for a vacancy amount of approximately \$1.6 million.

1 2 3 4 5 6 7 8	Reference:	NP-34 NLH Transcript - Roberts, October 15, 2003, p. 48, line 24 to p. 50, line 20 p. 51, lines 13-17 p. 56, line 15 to p. 63, line 18 p. 57, line 15 to p. 58, line 9	
9	Hydro's 29 vacant	positions as of October 2003, at an estimated average annual salary	
10	for 2004 of \$54,000 per position, also indicate a potential normal vacancy allowance for		
11	2004 of approximately \$1.6 million.		
12			
13 14 15 16 17 18	Reference:	Transcript - Roberts, November 12, 2003, p. 67, line 1 to p. 70, line 4 Brushett, 2003 GRA Report, p. 39, lines 6-9 Transcript - Brushett, December 11, 2003, p. 107, line 8 to p. 108, line 2	
19	Newfoundland Po	wer submits that the Board should increase Hydro's normal	
20	vacancy allowanc	e from \$1.0 million to \$1.6 million. This would be in keeping	
21		lesision in Orden No. D.H. 7 (0000,0000) and beard on meant	
	with the Board's c	decision in Order No. P.U. 7 (2002-2003) and, based on recent	
22	with the Board's c experience, reflec	ts the best estimate of what Hydro's normal vacancy will be in	
22 23	with the Board's c experience, reflec 2004.	ts the best estimate of what Hydro's normal vacancy will be in	
22 23 24	with the Board's c experience, reflec 2004.	ts the best estimate of what Hydro's normal vacancy will be in	
22 23 24 25	with the Board's of experience, reflect2004.b) Productivity All	ts the best estimate of what Hydro's normal vacancy will be in	
 22 23 24 25 26 	 with the Board's of experience, reflect 2004. b) Productivity All In Order No. P.U. 7 	<i>Ilowance</i> (2002-2003), the Board determined that a \$2.0 million productivity	
 22 23 24 25 26 27 	 with the Board's of experience, reflect 2004. b) Productivity All In Order No. P.U. 7 allowance for Hydro 	<i>Ilowance</i> (2002-2003), the Board determined that a \$2.0 million productivity o was appropriate for the 2002 test year. Mr. Wells has testified in	
 22 23 24 25 26 27 28 	 with the Board's of experience, reflect 2004. b) Productivity All In Order No. P.U. 7 allowance for Hydro this proceeding that 	<i>Ilowance</i> (2002-2003) and, based on recent (2002-2003) and, based on recent (2002-2003), the Board determined that a \$2.0 million productivity of was appropriate for the 2002 test year. Mr. Wells has testified in t the Board was indeed justified in establishing the productivity	
1	efficiencies were to be achieved. However, Hydro did not actually achieve the		
---	---	--	
2	productivity allowance in 2002, citing it as one of the reasons why controllable operating		
3	costs for 2002 exceeded the final 2002 test year forecast by approximately \$6.0 million.		
4			
5 6 7 8 9 10 11 12 13	Reference: Order No. P.U. 7 (2002-2003), p. 74 Transcript - Wells, October 9, 2003, p. 117, lines 20 to p. 124, line 8 and p. 131, line 25 to p. 133, line 18 Finance and Corporate Services Evidence, Roberts, Schedule II, 1 st Revision, Column (b), line 32 CA-44 NLH		
14	Hydro states that the additional \$1.5 million vacancy allowance proposed for 2004		
15	provides for future staffing reductions resulting from process improvement initiatives. In		
16	essence, therefore, this represents Hydro's proposed productivity allowance for the		
17	2004 test year.		
18			
19 20 21 22 23 24	Reference: Transcript - Roberts, October 14, 2003, p. 112, line 22 to p. 113, line 14 Transcript - Roberts, October 15, 2003, p. 54, line 23 to p. 55, line 12		
25	As testified by Mr. Brushett , the Board needs to determine whether the \$1.5 million		
26	represents a reasonable reflection of what should be the expected or targeted		
27	improvements in efficiency.		
28			
29	Mr. Brushett's comments:		

1	1.	suggest that	the savings already realized due to staff reductions in 2003 should
2		not be includ	ed in this allowance, and should therefore be treated as a direct
3		reduction in	forecast salaries (as proposed in section B.5.2.3 (b) above).
4	2.	recognize the	at it is the Board who should decide the amount of the productivity
5		allowance to	be imposed.
6 7		Reference:	Transcript - Brushett, December 11, 2003, p. 111, line 20 to p. 114 line 3
8			

9 Table B-6 below provides a comparison of Hydro's controllable operating costs for the

10 2004 test year versus Hydro's final 2002 test year as per Order No.P.U. 7 (2002-2003).

11

Co	Table B ntrollable Oper (\$000)	-6 rating Costs		
	2002 Final Test Year	2004 Test Year	Increase	% Increase
Salaries and Fringe Benefits	59,926 ¹	63,242 ⁴	3,316	5.5%
Non-Labour Costs	36,317	38,165	1,848	5.1%
Allocations	(10,546) ²	(9,746) ⁵	800	7.6%
Total Other Costs	85,697 ³	91,661 ⁶	5,964	7.0%

12 ¹ Finance and Corporate Services Evidence, Roberts, Schedule II, 1st Revision, Column (b), lines 15 and 25

14 ² Finance and Corporate Services Evidence, Roberts, Schedule II, 1st Revision, Column (b), line 31

³ Finance and Corporate Services Evidence, Roberts, Schedule II, 1st Revision, Column (b), line 33

⁴ Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2nd Revision,
 ⁵ Column (f), line 15
 ⁵ Finance and Corporate Complementary Evidence, Roberts, Schedule II, 2nd Revision,

 Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2nd Revision, Column (f), line 31

Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2nd Revision,
 Column (f), line 32

1 Table B-6 indicates that Hydro's controllable costs for 2004 have increased by \$6.0 2 million or 7% from the final 2002 test year. Notwithstanding wage increases over this 3 period, productivity initiatives undertaken by Hydro since its 2001 GRA have not been 4 effective in reducing overall costs. 5 6 The Board should exercise its regulatory judgment in determining what is an 7 appropriate productivity allowance for Hydro, given its performance since the 8 2001 GRA and Hydro's current operating characteristics. In making its 9 determination the Board may wish to give consideration to the following: 10 Increases in 2004 test year costs as compared to the final 2002 test year, as 11 indicated in Table B-6 above. 12 • The productivity allowance should not include the \$700,000 in salary 13 savings that will be realized in 2004 as a result of positions already 14 eliminated in 2003 (as referred to in section B.5.2.3 (b) above). 15 The degree of confusion around the continued use of staff complement as 16 opposed to FTEs in forecasting salaries for 2004 (as referred to in section 17 B.5.2.2 above). 18 • Hydro could not provide any estimate of the savings anticipated from the 19 business process reviews underway for 2003-2004 relating to (i) the 20 acquisition of goods and services, (ii) work management, and (iii) asset 21 management. 22 23 Transcript - Brushett, December 11, 2003, p. 93, line 21 to Reference: 24 p. 94, line 8

1	Hydro should experience further efficiency gains based on the continuous
2	nature of its business process reviews and other productivity initiatives.
3	
4	Newfoundland Power submits that a productivity allowance of \$2.0 million
5	remains appropriate for Hydro in setting its 2004 test year revenue requirement.
6	
7	B.5.3 Hydro Capitalized Expenses
8	Hydro's method of determining capitalized expenses is subjective. In Order No. P.U. 7
9	(2002-2003), the Board noted that a review of the methodology and approach used by
10	Hydro to determine its capitalized expenses would be appropriate at some point in the
11	future. Since the previous hearing, there have been no changes in Hydro's methodology
12	for capitalizing expenses nor has a study been completed to determine the
13	appropriateness of the existing methodology.
14	
15 16 17	Reference: Order No. P.U. 7 (2002-2003), p. 76, paragraph 4 Transcript - Roberts, October 16, 2003, p. 133, line 22 to p. 136, line 22
18	
19	Both Mr. Roberts and Mr. Brushett have noted the significance of under-estimating
20	capitalized expenses in determining revenue requirement. Under-estimating capitalized
21	expenses in the test year results in an increase in forecast net operating expenses and
22	test year revenue requirement on the one hand, and an increase in earnings to Hydro
23	when higher actual capitalized expenses are recorded.

1 2 3	Reference:	Transcript - Roberts, October 14, 2003, p. 151, lines 6-17 Transcript - Brushett, December 11, 2003, p. 114, line 24 to p. 115, line 21
4		
5	Information Exhibit	No. 25 provides an historical comparison of Hydro's actual
6	capitalized expense	es to budget for the years 1998 to 2002 ¹ and forecast 2003.
7	Information Exhibit	No. 25 shows that actual capitalized expenses have exceeded
8	budget (after adjust	ment for capitalized overtime) by an average of \$2.2 million over the
9	five-year period fror	n 1998 to 2002. The revised 2003 forecast for capitalized expenses
10	in the October filing	again demonstrates the conservative nature of Hydro's
11	methodology with re	espect to budgeting capitalized expenses with an increase of
12	approximately \$1.0	million in forecast capitalized expenses since the August filing (after
13	adjustment for capit	alized overtime). Conversely, the 2004 test year forecast for Hydro
14	capitalized expense	es has been reduced in the October filing by \$260,000.
15		
16 17 18 19 20	Reference:	Information Exhibit I-25 Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2 nd Revision, pp. 1-8 Transcript - Roberts, November 12, 2003, p. 75, line 8 to p. 76, line 3
21		
22	One of the primary	reasons indicated by Hydro for the increase in actual capitalized
23	expenses to budget	t has been additional involvement by Hydro staff in capital work and
24	new projects that w	ere unplanned and not budgeted. Mr. Martin points out that it is fair
25	to say that unexpec	ted projects will continue to occur in future years.

¹ Since the amount of capitalized overtime budgeted was not known, all capitalized overtime was removed from the analysis. As a result, the budget variances shown in the analysis are considered to be conservative.

1 2 3 4	Reference:	Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2 nd Revision, p. 4 of 8, lines 11-17 Transcript - Roberts, October 14, 2003, p. 139, line 24 to p. 140, line 8
5 6		Transcript - Martin, October 24, 2003, p. 170, line 10 to p. 171, line 14
7		
8	Mr. Brushett testifie	ed that it is appropriate and relevant for the Board to look at Hydro's
9	past experience in	terms of the impact that capitalized expenses have had upon
10	determining revenu	le requirement for Hydro.
11		
12 13	Reference:	Transcript - Brushett, December 11, 2003, p. 116, line 10 to p. 118, line 9
14		
15	Newfoundland Po	wer submits that Hydro's capitalized expenses in the 2004 test
16	year should be inc	creased by as much as \$2.0 million to reflect Hydro's consistent
17	under-budgeting	of this amount. This would provide a more representative
18	forecast of capita	lized expenses and resulting impact on revenue requirement
19	based on Hydro's	actual experience since 1998.
20		
21	B.5.4 Transportat	tion Costs
22	Transportation cost	ts in the 2004 test year are approximately \$300,000 higher than in
23	2003. A portion of	this increase is due to a reduction in capitalized vehicle expenses.
24	The remaining incr	ease is primarily due to increased costs related to aircraft usage.

1	Reference:	Finance and Corporate Services Supplementary Evidence,
2		Roberts, Schedule II, 2 nd Revision, p. 1 of 8, line 18
3		NP-261 NLH
4		Transcript - Martin, October 27, 2003, p. 11, line 2 to p. 12, line 14

B.5.4.1 Vehicle Costs

Over the period 1998 to 2002, there has been a reduction of 88 permanent staff at

Hydro. Over the same period the number of vehicles at Hydro has increased by 8.

Vehi	Table B-7 cles and Perma 1998 – 200	nent Staff 2
Year	Permanent Staff ¹	Number of Vehicles ²
1998	889	274
1999	901	267
2000	891	282
2001	847	285
2002	801	282

¹ From NP-10 NLH. ² From NP-24 NLH.

While there have been slight reductions in medium duty and heavy duty trucks over this

period, there have been increases in the number of light passenger vehicles.

Reference: NP-24 NLH

Hydro has stated that the increase in vehicles from 1998 to 2002 is primarily related to

15 units purchased for capital projects offset by 7 units eliminated as a result of fleet

1	rationalization. Hydro is currently conducting a review of its vehicle fleet, but has not
2	adjusted its 2004 test year costs for any items arising from this review.
3	
4 5	Reference: NP-193 NLH Transcript - Martin, October 27, 2003, p. 13, line 12 to p.15, line 9
6	
7	Hydro's operating vehicle costs have increased 25.6% from 2002 to forecast 2004.
8	Vehicles that were purchased for larger capital projects such as Granite Canal are now
9	being charged to operations and maintenance, resulting in a reduction in capitalized
10	vehicle costs. Operating vehicle costs in 2004 are forecast to increase by \$185,000, or
11	23.4% from 2002 for this reason alone. This reduction in capitalized vehicle costs is
12	shown in Table B-8 below.

T	able B-8
Capitalized	Vehicle Expenses
2001 –	Forecast 2004
	Capitalized Vehicle Expenses ¹
2001 Actual	\$ 473,546
2002 Actual	\$ 485,470
2003 Forecast	\$ 400,000
2004 Forecast	\$ 300,000

14 15

¹ From NP-261 NLH.

1 2 3 4 5 6 7	Reference:	Transcript - Martin, October 27, 2003, p. 10, line 17 to p. 12, line 14 Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2 nd Revision, p. 1 of 8, line 18 Grant Thornton Financial Consultants Report, p. 47, lines 10-18 NP-8 NLH, p. 5 of 5, lines 12-13 NP-261 NLH NP-263 NLH	
8			
9	Hydro has shown	an increase in the number of vehicles over the period 1998-	
10	2004. However, th	nere has been a significant reduction in the number of	
11	employees over th	nis same period. Hydro is conducting a review of its vehicle	
12	fleet, but has not a	adjusted its 2004 test year costs for any items arising from this	
13	review. The Board	d should therefore disallow the \$185,000 increase in Hydro's	
14	2004 operating vehicle costs since 2002 caused by a decrease in the utilization of		
15	vehicles on capita	Il projects.	
16			
17	B.5.4.2 Aircraft U	sage	
18	On October 27, 200	03 Mr. Martin testified that savings would be realized based on a	
19	reduction in helicop	oter usage. The amount of savings was estimated at between	
20	\$70,000 and \$75,0	00.	
21			
22	Reference:	Transcript - Martin, October 27, 2003, p. 21, line 1 to p. 22, line 6	
23			
24	In its October 31, 2	003 revised evidence, Hydro forecast a \$150,000 reduction in its	
25	2003 transportation	expense based on year-to-date experience with respect to overall	

1	aircraft usage. However, Hydro states that there is no basis to reduce 2004 test year
2	costs for aircraft usage from the August filing.
3	
4 5 6 7 8 9	Reference: Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2 nd Revision, p. 3 of 8, lines 19-21 Transcript - Roberts, November 12, 2003, p. 84, line 4 to p. 87, line 3
10	Newfoundland Power submits that a reduction of \$150,000 in 2004 test year
11	aircraft usage costs is warranted given Hydro's 2003 year to date experience.
12	
13	B.5.5 Loss on Disposal of Capital Assets – Davis Inlet
14	Hydro indicated to the Board at the 1995 Rural Rate Inquiry that,
15 16 17 18 19	"should the proposed relocation of Davis Inlet go ahead, Hydro will insist on infrastructure capital through Federal funding to fully defray any incremental capital expenditures forced on Hydro's customers should Hydro continue to be the operating utility for the relocated community".
20	Reference: NP-53 NLH, p. 34
21	
22	Hydro is now requesting that a forecast loss on disposal of capital assets in Davis Inlet
23	of \$725,000 be included in 2004 test year operating costs to be charged to Hydro's
24	customers. Mr. Roberts indicated the Federal Government would not reimburse Hydro

25 for this loss.

1 2 3 4 5	Reference:	Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2 nd Revision, p. 1 of 8, line 25 and p. 6 of 8, lines 16-17 Transcript - Roberts, November 12, 2003, p. 96, lines 4-10 Transcript - Roberts, November 12, 2003, p. 124, lines 3-18	
6			
7	Newfoundland Pow	ver recognizes that benefits will accrue to Hydro in the form of cost	
8	reductions in future	years due to the relocation from Davis Inlet to Natuashish. As	
9	testified by Mr. Roberts, the cost of constructing the new plant at Natuashish has been		
10	borne by the Federal Government, not Hydro. This will result in reduced depreciation		
11	and interest expense for Hydro in future years. Operating costs and perhaps some		
12	future capital costs may also be shared between Hydro and the Federal Government		
13	based on discussions currently underway between them.		
14			
15	Reference:	Transcript - Roberts, November 12, 2003, p. 105, line 21 to p. 107,	
10 17		Transcript - Roberts, November 12, 2003, p. 123, line 22 to p. 125, line 12	
18 19 20 21		Transcript - Roberts, November 12, 2003, p. 126, line 25 to p. 129, line 6	
22	Mr. Brushett indicat	tes, however, that it is inappropriate to charge the full \$725,000 loss	
23	to operating costs in the test year and that an amortization period of three to five years		
24	would be more appropriate. Newfoundland Power agrees with a five-year amortization		
25	of this loss on disposal in light of the future costs savings that will accrue to Hydro, as		
26	referred to above.		
27			
28	Reference:	Grant Thornton Supplementary Evidence, p. 7, lines 1-9	

1	Newfoundland Power agrees with Grant Thornton's recommendation regarding		
2	the \$725,000 forecast loss on disposal of capital assets in Davis Inlet in 2004.		
3	Newfoundland Power submits that the Board order this amount be amortized over		
4	a five-year period beginning in 2004. This will reduce Hydro's 2004 test year		
5	revenue requirement by \$580,000 (\$725,000 x 4/5).		
6			
7	B.5.6 Miscellaneous Costs		
8	B.5.6.1 Travel and Training		
9	Actual training costs for the 2002 test year were approximately \$200,000 less than		
10	budgeted. As of the end of October 2003, actual training costs were \$380,000 against		
11	an annual budget for 2003 of \$633,000.		
12			
13 14	Reference: Transcript - Roberts, October 15, 2003, p. 79, line 5 to p. 80, line 1 NP-305 NLH		
15			
16	Through its review of business processes and the implementation of purchasing credit		
17	cards in 2003, Hydro began charging travel costs associated with training directly to		
18	travel. Previously these costs would have been charged to training. This change has		
19	resulted in a reduction to training costs under the category 'Miscellaneous Expenses' in		
20	the October filing of approximately \$300,000 in both 2003 and 2004.		
21			
22 23 24	Reference: Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2 nd Revision, p. 1 of 8, lines 22 and 24 Transcript - Roberts, November 12, 2003, p. 90, line 23 to p. 92, line 22		

1	In 2003, these savings have resulted in a \$300,000 reduction in miscellaneous		
2	expenses, with no offsetting increase in forecast travel costs. In the 2004 test year,		
3	however, these savings in training costs have been reallocated to provide an offsetting		
4	increase in travel, and therefore no reduction in overall costs.		
5			
6 7 8 9	Reference: Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2 nd Revision, p. 1 of 8, lines 22 and 24 Transcript - Roberts, November 12, 2003, p. 90, line 23 to p. 95, line 18		
10			
11	Newfoundland Power submits that the \$300,000 increase in travel costs in 2004 to		
12	offset savings in training is unjustified based on actual 2002 and forecast 2003		
13	expenditures in this expense category. The Board should order Hydro to reduce		
14	2004 test year travel costs by \$300,000.		
15			
16	B.5.6.2 Inventory Write-offs		
17	In 2001, an initiative was undertaken by Hydro to identify excess and obsolete		
18	inventory. This initiative resulted in the write-off of excess and obsolete inventory in		
19	2001 of approximately \$1.0 million.		
20			
21 22 23 24 25	Reference: NP-253 NLH NP-255 NLH Finance and Corporate Services Evidence, Roberts, p. 23, lines 24-28 Grant Thornton Financial Consultants Report, 1999, pp. 31-32		

1	Actual inventory write-offs in 2002 totaled \$288,000 as opposed to forecast 2002 test		
2	year write offs of \$594,000, a reduction of \$306,000.		
3			
4	Reference: Grant Thornton Financial Consultants Report, p. 43, line 11		
5			
6	In response to Request for Information NP-269 NLH, Hydro has indicated that the value		
7	of obsolete items remaining in inventory is insignificant. However, forecast inventory		
8	write-offs for 2003 and 2004 are \$370,000 and \$420,000 respectively. These amounts		
9	are significantly higher than the amount of inventory write-offs experienced in 2002.		
10			
11 12 13	Reference: NP-269 GT Grant Thornton Financial Consultants Report, p. 43, line 11 and p. 44, lines 12-19		
14			
15	Newfoundland Power submits that Hydro has not provided sufficient justification		
16	to increase inventory write-offs in the 2004 test year. The Board should order		
17	Hydro to reduce its forecast inventory write-offs in 2004 to an amount that is		
18	consistent with 2002 actual expense. This will reduce Hydro's 2004 test year		
19	revenue requirement by approximately \$132,000 (\$420,000 - \$288,000).		
20			
21	B.5.6.3 Wabush Terminal Station		
22	In response to NP-291 NLH, Hydro indicated that forecast purchased power expenses		
23	related to the Wabush Terminal Station in 2004 have increased over the original filing		
24	by over \$331,000. The increase is due to previously unbudgeted costs related to		

1	synchronous condenser maintenance and control upgrades. These expenses, which		
2	may be regarded as capital in nature, are treated as an operating expense by Hydro.		
3	The expenses will not be c	apitalized because Hydro does not own the assets. Hydro	
4	confirms that the treatment	of these expenses as operating expenses does impact	
5	proposed rates in Labrador.		
6			
7 8 9	Reference: NP-29 Transo line 18	1 NLH cript - Roberts, November 12, 2003, p. 81, line 12 to p. 82, and p. 129, line 7 to p. 132, line 1	
10			
11	In the interest of rate stat	pility, Newfoundland Power submits that costs incurred	
12	by Hydro for synchronou	s condenser maintenance and control upgrades at the	
13	Wabush Terminal Station be deferred and amortized over a five year period		
14	beginning in 2004. This will reduce Hydro's 2004 test year revenue requirement		
15	by approximately \$265,00	00 (\$331,000 x 4/5).	
16			
17	B.6 Summary		
18	Newfoundland Power sub	omits that:	
19	The Board should	accept Hydro's proposal to use a purchase price for No.	
20	6 fuel of \$28.95/bbl	. for the 2004 test year as reasonable.	
21			
22	The Board should	accept the use of a 30-year record for determining the	
23	Average Annual Er	nergy for 2004 as agreed in the negotiated settlement.	
24			

1	The Board should not make any determination as to the appropriate period
2	of record for use in determining the Average Annual Energy for future
3	hearings until Hydro has completed the required analysis and presented
4	the results for review at a public hearing.
5	
6	The Board should approve the use of a Holyrood fuel conversion factor of
7	636 kWh/bbl for use in determining 2004 test year fuel costs.
8	
9	The Board should accept Hydro's proposed diesel costs for the 2004 test
10	year as reasonable.
11	
12 13	Exemption Orders from the Lieutenant-Governor in Council issued under
14	the Public Utilities Act and the Electrical Power Control Act, 1994 entitle
15	Hydro to recover the cost of power purchased under long term contracts
16	with non-utility generators.
17	
18	Newfoundland Power submits that specific 2004 test year costs be reduced as
19	shown in the following Table B-9.
20	

Table B-9 Proposed Hydro Cost Reductions 2004 Test Year		
Depreciation	\$ 169,000	
Fuel ¹	\$1,600,000	
Salaries Forecast Wage Increase for 2004 Positions Eliminated in 2003 Increase in Normal Vacancy Allowance ²	\$ 300,000 \$ 700,000 <u>\$ 600,000</u> \$1,600,000	
Hydro Capitalized Expense	\$2,000,000	
Transportation Costs Vehicle Costs Aircraft Usage	\$ 185,000 <u>\$ 150,000</u> \$ 335,000	
Loss on Disposal of Capital Assets - Davis Inlet	\$ 580,000	
Travel	\$ 300,000	
Inventory Write-offs	\$ 132,000	
Wabush Terminal Station	\$265,000	
Reduction in 2004 Revenue Requirement	\$6,981,000	

¹ Based on Fuel Conversion factor at Holyrood of 636 kWh/bbl.
² \$1,600,000 minus \$1,000,000.

3 4

1 In addition, with respect to Hydro's proposed productivity allowance (or 2 additional vacancy allowance as referred to by Hydro) of \$1.5 million, the Board 3 should exercise its regulatory judgment in determining what is an appropriate 4 productivity allowance for Hydro, given its performance since the 2001 GRA and 5 Hydro's current operating characteristics. Newfoundland Power submits that 6 7 Hydro can achieve greater efficiencies and productivity improvements. 8 Opportunities exist for Hydro to reorganize, leverage technology and 9 manage its operations to further reduce costs. Newfoundland Power 10 believes that Hydro should continue to have a strong incentive to seek 11 productivity and efficiency gains. 12 13 Hydro has placed significant emphasis on business process improvement 14 since 2002. Limited productivity gains have been realized as a result. 15 However, the evidence suggests that additional productivity gains are 16 possible given what has been expended to date, the limited gains achieved 17 to date, the limited number of processes reviewed to date, the on-going 18 and continuous nature of this initiative, and the potential for other changes 19 within Hydro aimed at improving overall performance and reducing costs. 20 21 The Board should consider: 22 i) Increases in 2004 test year costs as compared to the final 2002 test

23

B-47

year, as indicated in Table B-6 above.

1	ii)	The productivity allowance should not include the \$700,000 in salary
2		savings that will be realized in 2004 as a result of positions already
3		eliminated in 2003 (as referred to in Section B.5.2.3 (b) above).
4	iii)	The degree of confusion around Hydro's continued use of staff
5		complement as opposed to FTEs in forecasting salaries for 2004 (as
6		referred to in Section B.5.2.2 above).
7	iv)	Hydro could not provide any estimate of the savings anticipated from
8		the business process reviews underway for 2003-2004 relating to (i)
9		the acquisition of goods and services, (ii) work management, and (iii)
10		asset management.
11	v)	Hydro should experience further efficiency gains based on the
12		continuous nature of its business process reviews and other
13		productivity initiatives.
14		
15	In Order No	. P.U. 7 (2002-2003), the Board determined that a \$2.0 million
16	productivity	allowance for Hydro was appropriate. Hydro was not successful in
17	achieving th	ne productivity allowance established by the Board in 2002.
18		
19	Newfoundla	nd Power submits that a productivity allowance of \$2.0 million

20 remains appropriate for Hydro in setting its 2004 test year revenue requirement.

C. RETURN ON RATE BASE

$\frac{2}{3}$	In this section of its brief, Newfoundland Power addresses the 2004 test year forecast		
4	average rate base and Hydro's entitlement to earn a just and reasonable return on rate		
5	base.		
6			
7	C.1 General		
8 9	Section 80 of the Public Utilities Act entitles Hydro to earn a just and reasonable return		
10	on its rate base. Hydro's return on rate base represents the sum of the return to		
11	Hydro's investors, being its debt holders and its common equity holder, the Government		
12	of Newfoundland and Labrador.		
13			
14	The Electrical Power Control Act, 1994, section 3 (a) (iii) sets out the power policy of the		
15	province. A utility shall have its rates set		
16 17 18 19 20	"to enable it to earn a just and reasonable return as construed under the <i>Public Utilities Act</i> so that it is able to achieve and maintain a sound credit rating in the financial markets of the world."		
21	C.2 Rate Base		
22	In paragraph 6 (14) of its Amended Application, Hydro proposes a forecast 2004		
23	Average Rate Base of \$1,485,468,000. In its 2 nd Revision, Hydro filed evidence		
24	showing a lower revised forecast for its 2004 Average Rate Base of \$1,483,381,000.		
25			

1	Newfoundland Power submits that the Board should rely upon the revised forecast		
2	Average Rate Base of \$1,483,381,000 in determining Hydro's revenue requirement for		
3	the test year.		
4			
5 6	Reference: Finance and Corporate Services Evidence, Roberts, Schedule III, 2 nd Revision		
7			
8	If the Board orders Hydro to reduce its forecast capital expenditures, as suggested in		
9	section B of this brief, Hydro must also be required to make the appropriate adjustments		
10	to its forecast average rate base.		
11			
12	In paragraph 7 (1) of its Amended Application, Hydro requests that the Board make an		
13	order "fixing and determining the 2004 rate base of the Applicant at \$1,485,468,000." It		
14	is premature to fix and determine Hydro's 2004 Rate Base at this time.		
15			
16	C.3 Return on Rate Base		
17	C.3.1 Cost of Debt		
18	Hydro's borrowings include short-term promissory notes and longer-term debentures.		
19			
20 21	Reference: Finance and Corporate Services Evidence, Roberts, p. 17, lines 10-20		
22			
23	Hydro's 2004 forecast cost of debt is provided in Mr. Robert's Supplementary Evidence		
24	dated October 31, 2003, Schedule VII, 2 nd Revision. The forecast cost of debt reflects		

1	interest expense for the 2004 test year of \$98,165,000, as shown in Mr. Roberts		
2	Schedule II, 2 nd Revision, p. 1 of 8, line 33.		
3			
4 5 6	Reference:	Supplementary Evidence, Roberts, Schedule VII, 2 nd Revision Supplementary Evidence, Roberts, Schedule II, 2 nd Revision, p. 1 of 8, line 33	
7			
8	C.3.1.1 Short-Term Interest		
9	On October 15, 2003, Mr. Roberts testified that Hydro's pending revised evidence would		
10	reflect more current forecasts of promissory notes outstanding for 2003 and 2004, and		
11	short term interest expense for the 2004 test year.		
12			
13 14 15	Reference:	NP-100 NLH Transcript - Roberts, October 15, 2003, p. 36, line 23 to p. 38, line 9.	
16	Hydro's revised evidence dated October 31, 2003 reflects a reduction in forecast short-		
17	term interest rates in the 2004 test year from an average of 5.0% to 2.78%. The total		
18	reduction in forecast short-term interest expense for test year 2004 was approximately		
19	\$2.8 million. Approximately \$3.5 million was related to savings from lower short-term		
20	interest rates (as expected based on testimony by Mr. Roberts on October 15, 2003),		
21	offset by approximately \$0.7 million in increased interest costs related to a \$23 million		
22	average increase ir	n promissory notes for 2004.	
23			
24 25 26 27	Reference:	Finance and Corporate Services Evidence, Roberts, Schedule II, 2 nd Revision - October 31, 2003, p. 1 of 8, line 33 and p. 6 of 8, lines 23-24 NP-300 NLH, p. 5 of 5	

1 2 3 4 5	Transcript - Roberts, Novembe line 13 Finance and Corporate Service 2 nd Revision NP-100 NLH, p. 3 of 3	r 12, 2003, p. 107, line 24 to p. 110, es Evidence, Roberts, Schedule VIII,	
6			
7	In PUB-191 NLH, Hydro indicated that the increase	in promissory notes was primarily	
8	due to higher forecast borrowing requirements in 20	003 and therefore an increase in the	
9	amount of promissory notes as of January 1, 2004.	These increased borrowing	
10	requirements were identified as being comprised of increased fuel expense (\$10		
11	million), lower proceeds from long-term debt issue ((\$14 million) and other factors (-\$1	
12	million).		
13			
14	Reference: PUB-191 NLH		
15			
16	Mr. Roberts corrected a number of inaccuracies in I	Hydro's response to Request for	
17	Information PUB-191 NLH during cross-examination on November 12, 2003. Mr.		
18	Roberts confirmed that the significant items contributing to the \$23 million increase in		
19	forecast promissory notes were:		
20			
21	Increased fuel expense	\$ 7.5 million	
22	Lower proceeds for long-term debt issue	\$ 10.4 million	
23	Increase in cash from operations	\$(2.4 million)	
24	Reduction in long-term debt	\$ 1.2 million	
25	Changes in non-cash working capital	\$ 9.0 million	

1	Mr. Roberts confirm	ned that the \$9 million increase in promissory notes due to changes
2	in non-cash working	g capital was due largely to forecast reductions in accounts payable
3	and accrued liabiliti	es in 2003 and 2004 of approximately \$10.0 million and \$13.0 million
4	respectively. Howe	ever, Mr. Roberts could not fully explain the change in accounts
5	payable and indicat	ted that this was only a balancing number. The unexplained
6	increase in account	ts payable indicates that interest expense in the 2004 test year is
7	overstated by appro	oximately \$278,000.
8		
9 10 11 12 13 14	Reference:	Finance and Corporate Services Supplementary Evidence, Roberts, Schedule II, 2 nd Revision, p. 6 of 8, lines 23-24 and Schedule VIII, 3 rd Revision Transcript - Roberts, November 12, 2003, p. 109, line 23 to p. 118, line 9 NP-308 NLH
15		
16	Mr. Brushett confirr	med that accounts payable is one of the factors related to the
17	determination of bo	prrowing requirements. Mr. Brushett also testified that Hydro's
18	methodology of usi	ng accounts payable as a balancing number in determining
19	borrowing requirem	nents appears contrary to standard practice. Mr. Brushett stated that
20	Grant Thornton had	d not completed a detailed review of Hydro's test year borrowing
21	requirements and in	nterest costs.
22		
23 24 25 26 27 28	Reference:	Transcript - Brushett, December 11, 2003, p. 119, line 2 to p. 123, line 9 NP-300 NLH Exhibit WW #1, Tab 2, Financial, p. 2 Exhibit WW #2, Tab 2, Financial, p. 2 Information Exhibit 26, p. Tab 2, Financial, p. 2

1 2 3 4		Transcript - Brushett, December 11, 2003, p. 124, line 11 to p. 125, line 3
5	Newfound	and Power submits that the Board should order a \$278,000 reduction
6	in Hydro's	2004 interest expense based on Hydro's unjustified and unexplained
7	decrease ir	n forecast accounts payable for 2003 and 2004, and related impacts on
8	short term	promissory notes and test year interest expense.
9		
10	C.3.2 Cost	of Equity
11	C.3.2.1 Inti	roduction
12	In order to c	letermine the appropriate rate of return on equity (ROE) to be used in
13	determining	Hydro's rate of return on rate base, the Board will need to consider the
14	following iss	sues:
15		
16	a)	whether Hydro should be regulated as an investor owned utility or as a
17		Crown owned utility; and
18		
19	b)	what consideration should the Board give to the following factors:
20 21		 the lack of a sound financial plan for Hydro in this proceeding to achieve an appropriate capital structure;
22 23		2. the payment of the guarantee fee; and
24		3. the social policy benefits obtained from Hydro's operations.

1 In determining an appropriate ROE for Hydro, the Board will need to exercise regulatory 2 judgment in tempering normal market returns for an investor owned utility to achieve 3 and balance other regulatory objectives. 4 C.3.2.2 Order No. P. U. 7 (2002-2003) 5 6 The Board considered Hydro's financial and operating characteristics in Order No. 7 P.U. 7 (2002-2003). The Board determined that Hydro did not have the characteristics 8 of an investor owned utility and that there was no basis for regulating Hydro as an 9 investor owned utility. The Board identified several relevant factors, including Hydro's 10 debt/equity ratio, dividend payouts, debt guarantee, government directives and 11 corporate income tax exempt status. 12 13 Order No. P.U. 7 (2002-2003), pp. 39-42 Reference: 14 15 The Board accepted Hydro's proposed debt equity ratio of 83/17 for the 2002 test year 16 and target short term debt equity ratio of 80/20. The Board did not find evidentiary 17 support for the principle of Hydro moving to a capital structure of 60/40. 18 19 Reference: Order No. P.U. 7 (2002-2003), pp. 42-43 20 21 The Board accepted Hydro's request for a 3% ROE in the 2002 test year, while 22 acknowledging that this level of ROE was below normal market returns. The Board 23 deferred consideration of a more normal return to a future application by Hydro.

1	Reference: Order No. P.U. 7 (2002-2003), pp. 43-45	
2		
3	C.3.2.3 Basis of Regulation	
4	Hydro does not have the financial structure of an investor owned utility.	
5		
6 7 8 9	Reference: Transcript - McShane, December 3, 2003, p. 92, line 24 to p. 93, line 10	
10	Hydro has not presented to the Board in this proceeding any plan to achieve financial	
11	targets similar to an investor owned utility.	
12		
13	In the 2001 GRA, Hydro proposed a 60/40 long term capital structure, as would be the	
14	case for an investor owned utility. Hydro has since abandoned the 60/40 capital	
15	structure as being not practically achievable in the foreseeable future.	
16		
17 18 19 20 21	Reference: Order No. P. U. 7 (2002-2003), p. 43 Transcript - Roberts, October 15, 2003, p. 126, line 8 to p. 127, line 22 Transcript - McShane, December 3, 2003, p. 85, line 7 to p. 86, line 8 and p. 94, lines 6-14	
22		
23	Newfoundland Power submits that Hydro does not have the financial or operating	
24	characteristics of an investor owned utility. Newfoundland Power submits that Hydro	
25	should be regulated as a Crown owned utility, not as an investor owned utility.	

1 C.3.3 Capital Attraction and Creditworthiness

2	Hydro's ability to attract capital is entirely dependent upon Government's guarantee of
3	its debt. In this respect, Ms. McShane stated:
4 5	"Hydro would not be financially viable at either its forecast capital structure or its target capital structure in the absence of a guarantee."
6	
7	Reference: Cost of Capital Evidence, McShane, p. 19, lines 6-7
8	
9	As a result of the Government guarantee, combined with Hydro's current capital
10	structure, Hydro's credit rating is based largely upon that of its guarantor and
11	shareholder, Government.
12	
13 14	Reference: Finance and Corporate Services Evidence, Roberts, 1 st Revision, p. 10, lines 3-5
15	
16	Accordingly, Newfoundland Power submits that in assessing a fair ROE for Hydro at this
17	time, the record is clear that the level of Hydro's ROE will have no current impact upon
18	Hydro's ability to attract capital or its credit rating.
19	
20	C.3.4 Capital Structure and Dividend Policy
21	In Order No. P.U. 7 (2002-2003), the Board accepted Hydro's target short-term
22	debt/equity ratio of 80/20. This target was in keeping with the Board's 1992 report. The
23	Board noted that the payment of proposed dividends in 2002 was contrary to Hydro's
24	own dividend policy and inconsistent with Hydro's long-term financial objectives.

1	Reference: Order No. P. U. 7 (2002-2003), pp.38 and 43	
2		
3	In 2002, Hydro paid \$65.7 million in dividends, or 675% of regulated net operating	
4	income, well beyond the dividend policy of 75%. In 2003, Hydro paid a further \$5.6	
5	million in dividends, again contrary to Hydro's dividend policy. These dividend	
6	payments came as a result of a request from Hydro's shareholder, Government.	
7		
8 9 10	Reference: Transcript - Wells, October 9, 2003, p. 4, line 7 to p. 7, line 22 Transcript - Roberts, October 15, 2003, p. 97, line 13 to p. 99, line 17	
11		
12	As a result of the payment of these dividends totaling \$71.3 million, the percentage of	
13	debt in Hydro's capital structure deteriorated to 86.4% in 2003 and 85.8% for forecas	
14	2004.	
15		
16 17 18	Reference: Transcript - Wells, October 9, 2003, p. 3, line 18 to p. 4, line 6 Transcript - Brushett, December 11, 2003, p. 82, line 17 to p. 83, line 24	
19		
20	Mr. Roberts testified that:	
21 22	"If there is little equity in the capital structure, [Hydro's] financial flexibility is reduced."	
23		
24 25 26 27	Reference: Finance and Corporate Services Evidence, Roberts, p. 9, lines 21-22 Transcript - Roberts, October 15, 2003, p. 100, line 16 to p. 101, line 14	

1	Hydro's cost of capital expert, Ms. McShane, considered Hydro as a Crown owned		
2	utility and compared it to other Crown owned utilities. Most other Crown owned utilities		
3	in Canada have legal or de facto maximum debt to equity ratios, with a maximum debt		
4	component of 80%.		
5			
6 7 8 9	Reference: Transcript - McShane, December 3, 2003, p. 87, line 25 to p. 90, line 21		
10	Ms. McShane testified that 80% debt provides the minimal equity cushion compatible		
11	with being a self-supporting enterprise. A debt ratio in excess of 80% was not, in her		
12	view, compatible with being a self-supporting entity.		
13			
14 15 16 17 18	Reference: Cost of Capital Evidence, McShane, p. 14, lines 20-22 Transcript - McShane, December 3, 2003, p. 86, line 24 to p. 87, line 24		
19	Ms. McShane has stated that Hydro's ability		
20 21 22 23 24 25	"to attain its target capital structure is dependent on maintaining a supportive dividend policy in conjunction with a fair and reasonable return on equity. A supportive dividend policy is one which is predictable to both the shareholders and management and thus permits reasonable planning on the part of both".		
26	Reference: Cost of Capital Evidence, McShane, p. 17, lines 7-10		
27			
28	The evidence indicates that there has been some interaction between Hydro and its		
29	shareholder on matters relating to financial planning, including dividends. The		

1	consequences of a failure to establish a sound financial plan appears to have been		
2	specifically recognized by Hydro in its discussion paper where it is indicated that		
3 4 5 6	"failure to adhere to such a policy could result in similar disallowances by the Board, thereby adversely impacting on shareholder return."		
7 8	Reference: Corporate Overview Evidence, Wells, Schedule II Transcript - Wells, October 7, 2003, p. 163, line 6 to p. 167, line 2		
9			
10	Ms. McShane testified that if Hydro's debt ratio stays at the current level or deteriorates,		
11	rating agencies will have a tendency to view the corporation as not being fully self-		
12	supporting. A failure to progress towards the 80/20 target will be perceived as an		
13	inability to operate as a self supporting commercial enterprise.		
14			
15 16 17 18	Reference: Transcript - McShane, December 3, 2003, p. 91, line 11 to p. 92, line 23		
19	Hydro will not achieve a debt/equity ratio of 80/20 in the next five years with either a		
20	75% dividend payment policy or a 50% dividend payment policy. A 75% dividend policy		
21	would produce an 85% debt ratio in 2008, while a 50% dividend policy would produce		
22	an 83% debt ratio in 2008. It would require a 25% dividend payment policy to achieve		
23	an 81% debt ratio, close to the 80/20 target ratio, by 2008.		
24			
25 26 27 28 29	Reference: Corporate Overview Evidence, Wells, Schedule II, Discussion Paper on Hydro Dividends, p. 6 of 7 Finance and Corporate Services Evidence, Roberts, p. 10 Transcript - McShane, December 3, 2003, p. 90, line 6 to p. 91, line 24		

1 Hydro's financial projections for 2003-2007 continue to be based on a 75% dividend 2 policy. 3 4 Reference: CA-3 NLH, Financial Projection 2003 to 2007, p. 10 5 6 7 Mr. Roberts confirmed that a 75% dividend policy is still the policy of Hydro and that the 8 capital structure target remains an 80/20 debt equity ratio. Yet, the evidence is clear 9 that a 75% dividend policy will only result in an 85% debt ratio by 2008, not materially 10 different than the 86% ratio for 2003. 11 12 Reference: Transcript - Roberts, October 15, 2003, p. 102, line 10 to p. 106, line 1 13 14 15 16 Hydro does not have the minimum equity in its capital structure which its own financial 17 expert considers appropriate for a Crown owned utility. Its capital structure has actually 18 weakened since 2002, with a debt component that has increased from 83% to 86%. 19 Hydro does not have a supportive dividend policy to permit material improvement in its 20 capital structure. Hydro has not yet been able to formulate and implement a sound 21 financial plan to achieve the capital structure appropriate for a Crown owned utility. 22 23 Newfoundland Power accepts that the payment of dividends is a matter primarily for 24 Hydro, its Board of Directors and its shareholder. However, for Hydro to meet the 25 requirements of the *Electrical Power Control Act*, 1994, Hydro has an obligation to 26 establish a capital structure that ensures that it maintains long-term financial strength

1	and creditworthiness. The consequences of the absence of a sound financial plan		
2	should not be borne by consumers of electricity.		
3			
4	The evidence indicates, and the Board has previously accepted, that Hydro should have		
5	a capital structure with a debt/equity ratio of 80/20. The Board will have to exercise its		
6	regulatory judgment in determining whether or not changing Hydro's ROE is warranted		
7	in view of the absence of a sound financial plan.		
8			
9	C.3.5 The Debt Guarantee		
10	Hydro's debt continues to be guaranteed by the Government of Newfoundland and		
11	Labrador. Hydro continues to pay Government a 1% guarantee fee for providing the		
12	guarantee. The guarantee fee is forecast to be \$14.7 million in 2004.		
13			
14 15 16 17	Reference: Finance and Corporate Services Evidence, Roberts, Schedule VII, 2 nd Revision		
18	Newfoundland Power does not contend that the payment of the guarantee fee is		
19	inappropriate or that it is not of benefit to consumers. It enables Hydro to borrow at		
20	reasonable rates that could not otherwise be achieved with Hydro's capital structure.		
21			
22	Government's investment in Hydro consists of Hydro's retained earnings and		
23	Government's debt guarantee. Ms. McShane testified that Hydro is currently self-		
24	supporting. Hydro has been able to meet its operating and maintenance expenses and		
25	financial obligations without looking to its shareholder or debt guarantor.		

1 2	Reference:	Transcript - McShane, December 3, 2003, p. 112, line 3, p. 114, line 1
3		Transcript - McShane, December 3, 2003, p. 166, line 23 to p. 167, line 23
4		
5		
6	Consequently, the	Government is not paying any of Hydro's costs. The guarantee fee
7	is, in substance, a return to Government in respect of its ownership of Hydro.	
8		
9	Newfoundland Pow	ver submits that the Board should consider the payment of the
10	guarantee fee in determining the just and reasonable return that Government should	
11	receive on its inves	stment in Hydro.
12		
13	C.3.6 Social Polic	cy Benefits
14	Hydro continues to	operate in a manner which reflects social and public policy
15	objectives. As such, it does not operate fully in accordance with regulatory principles	
16	that would be applicable to an investor owned utility.	
17		
18	The rural deficit, for example, will be in excess of \$41 million in 2004. In the summer	
19	2003, Government directed the Board to continue the cross-subsidization practice and	
20	ordered the continuation of certain preferential rates that Hydro had proposed to	
21	eliminate.	
22		
23 24	Reference:	Cost of Service Evidence, Greneman, Exhibit RDG-1, 2 nd Revision, p. 3 of 107, line 11, column 5

1 Newfoundland Power accepts that Government has the right to require such cross-

2 subsidization and give such policy directions with respect to rates.

3

4 However, Newfoundland Power submits that the Board should consider the cross-5 subsidization and other social policy benefits to Government from Hydro's operations as 6 a Crown owned utility. Sound regulatory principles prohibit an investor owned utility 7 from conferring benefits on its shareholders, other than the return permitted within the 8 allowed range of rate of return on rate base. The Board should consider the value of 9 such social policy benefits to Government from the operations of Hydro in setting the 10 just and reasonable return. Otherwise, Government as shareholder of a Crown owned 11 utility would potentially receive a total return which exceeds that available from an 12 investor owned utility.

13

14 **C.3.7** Submission with Respect to Hydro's ROE

Table C-1 sets forth Hydro's existing ROE and the alternative positions advanced in thisproceeding.

17

Table C-1 Return on Equity		
Existing	3%	
Hydro Proposal	9.75%	
McShane	11.0 – 11.25%	
Kalymon	8.5 - 9.0%	
Waverman	5.83% with consideration of an additional 1% equivalent to the guarantee fee	

1

3	
4	

Reference: Transcript - McShane, December 3, 2003, p. 45, lines 2-3 Transcript - Kalymon, December 4, 2003, p. 3, lines 8-9 Transcript - Waverman, December 4, 2003, p. 58, lines 14-21

6

5

Hydro has proposed that it should receive a 9.75% return on equity, consistent with that of Newfoundland Power, an investor owned utility. Hydro has the burden of proving that it is entitled to be treated as an investor owned utility and entitled to an investor owned utility rate of return on equity. Hydro has not proven that it is entitled to be treated as a investor owned utility. Hydro has effectively abandoned that objective.

Hydro must demonstrate that it has a sound plan to achieve the financial and operating characteristics appropriate for Hydro as a Crown owned utility. Hydro has made little or no progress on most of the factors and objectives that would be required for such a plan since an 80/20 target capital structure was approved for Hydro in 1992. Hydro has actually moved backwards on the key issue of capital structure, with a debt ratio now of 86%.
The Board must consider whether or not awarding an increased ROE for Hydro in these
 circumstances advances any regulatory objective.

3

The Board should consider the degree to which it is appropriate to reduce Hydro's ROE below normal market returns in order to incent Hydro to develop and implement a sound financial plan in the long term interests of the consumers of the Province.

7

8 Hydro has been and remains able to borrow and maintain a sound credit rating at the 9 previously approved rate of return on equity. Hydro continues to have appropriate 10 interest coverage on its debt. Hydro has no major capital projects requiring substantial 11 borrowing in the next few years. This gives Hydro time to develop a sound financial 12 plan before its next general rate application.

13

The Board will also have to exercise its judgment in setting an appropriate ROE taking into consideration the financial return to Government from the guarantee fee and the social policy benefits directed by Government through Hydro's operations.

17

These matters require the Board to make decisions based upon policy and regulatory judgment. The determination of an appropriate ROE for Hydro in the circumstances is not a matter that can be determined simply on a mathematical basis from the evidence.

1 The Board must decide whether to increase Hydro's ROE from its existing level and, if

2 so, the appropriate ROE compared with normal market returns, taking into account

3 competing regulatory objectives and principles.

4

5 **C.3.8** Range of Rate of Return, Excess Earnings Account and Automatic 6 Adjustment Formula

7 Hydro has not brought forward any proposals in relation to three related issues: i) a

8 range of rate of return on rate base, ii) an excess earnings account, or iii) an automatic

9 adjustment formula.

10 11 Reference: Transcript - Roberts, October 15, 2003, p. 106, lines 17-22 12 Transcript - McShane, December 3, 2003, p. 94, line 24 to p. 95, 13 line 4 14 Transcript - Brushett, December 11, 2003, p. 83, line 25 to p. 84, 15 line 8 16 17 18 Hydro's stated position in response to Requests for Information, supported by its 19 President and Chief Executive Officer, is that it is premature to establish a range of rate 20 of return on rate base. 21 22 NP-234 NLH Reference: 23 Transcript - Wells, October 9, 2003, p. 19, line 2 to p. 24, line 13 Transcript - Brushett, December 11, 2003, p. 64, line 23 to 24 25 p. 65, line 10 26 27 Mr. Brushett recommended that the Board establish an allowed range of rate of return 28 on rate base with an excess earnings account. While Hydro had not made any proposal 29 or presented any evidence with respect to a range of rate of return on rate base,

1	Mr. Brushett testified that "Hydro would have its opinion and would probably address
2	this in argument". (December 11, 2003, p. 85, lines 2-4) Mr. Brushett acknowledged
3	that the issue of a range is affected by the allowed rate of return and that different
4	parameters and conclusions may result depending on the rate of return on equity and
5	capital structure. (December 11, 2003, p. 88, line 17 to p. 89, line 9) Mr. Brushett
6	acknowledged the need for the Board to "go through due process". (December 11,
7	2003, p. 90, line 9)
8	
9 10 11 12	Reference: Transcript - Brushett, December 11, 2003, p. 83, line 25 to p. 91, line 8
13	There has been little discussion or analysis of an appropriate range of rate of return on
14	rate base in this hearing because Hydro has not brought forward any proposal for such
15	a range. Differences in financial and operating characteristics between utilities may
16	require a different range of rate of return on rate base. Newfoundland Power submits
17	that the Board does not have sufficient evidence to determine an appropriate range of
18	rate of return on rate base for Hydro.
19	
20	However, if the Board increases Hydro's ROE beyond the existing 3% rate, the Board
21	may need to establish a range of rate of return on rate base and an excess earnings
22	account.
23	
24	With respect to an automatic adjustment mechanism, Mr. Brushett recommended that
25	Hydro be required to bring forward a proposal for an automatic adjustment mechanism

1	because there may be specific issues relative to Hydro that could result in a different		
2	formula than that in place for Newfoundland Power. Mr. Brushett testified that there are		
3	issues as to what Hydro believes are appropriate mechanisms and trigger points.		
4			
5 6 7 8	Reference: Transcript - Brushett, December 11, 2003, p. 71, line 2 to p. 72, line 5 Transcript - Brushett, December 11, 2003, p. 83, line 25 to p. 91 line 8		
9			
10	Newfoundland Power submits that integrated proposals for dividend policy, capital		
11	structure, rate of return on equity, rate of return on rate base, range, excess earnings		
12	account, and automatic adjustment mechanism are required to fully address the		
13	financial position of Hydro. All of these items are important components in the		
14	regulation of Hydro as a Crown owned utility.		
15			
16	The preferable approach with respect to a range of rate of return on rate base, an		
17	excess earnings account and an automatic adjustment formula would be to deal with		
18	these issues together when Hydro brings forward an integrated proposal.		
19			
20	C.4 Summary		
21	Newfoundland Power submits that the Board should rely upon the revised		
22	forecast Average Rate Base of \$1,483,381,000 in determining Hydro's revenue		
23	requirement for the test year.		

1	If the Board orders Hydro to reduce its forecast capital expenditures, as		
2	suggested in section B of this brief, Hydro must also be required to make the		
3	appropriate adjustments to its forecast average rate base.		
4			
5	It is premature to fix and determine Hydro's 2004 Rate Base at this time.		
6			
7	Newfoundland Power submits that the Board should order a \$278,000 reduction		
8	in Hydro's 2004 interest expense based on Hydro's unjustified and unexplained		
9	decrease in forecast accounts payable for 2003 and 2004, and related impacts on		
10	short term promissory notes and test year interest expense.		
11			
12	Newfoundland Power submits that Hydro should be regulated as a Crown owned		
13	utility, not as an investor owned utility.		
14			
15	Newfoundland Power submits that the Board will have to exercise its regulatory		
16	judgment in setting Hydro's ROE in view of:		
17	1) the lack of a sound financial plan for Hydro in this proceeding to		
18	achieve an appropriate capital structure;		
19	2) the guarantee fee, and		
20	3) the social policy benefits to Government.		

If the Board increases Hydro's ROE beyond the existing 3% rate, the Board may
 need to establish a range of rate of return on rate base and an excess earnings
 account.

- 4
- 5 The preferable approach with respect to a range of rate of return on rate base, an
- 6 excess earnings account and an automatic adjustment formula would be to deal
- 7 with these issues together when Hydro brings forward an integrated proposal.

1 2

D. COST OF SERVICE

3 D.1 Plant Assignments on the Island Interconnected System

4 D.1.1 General

A cost of service methodology requires that the cost of each component of plant be
assigned to customers in a fair and equitable manner. For the purpose of plant
assignment in Hydro's cost of service study on the Island Interconnected System, the
customers include Newfoundland Power, individual Industrial Customers and Hydro
Rural.

10

11 Reference: Production Evidence, Haynes, Exhibit JRH-3, p. 23

12

In its 2001 GRA, Hydro proposed that the 138 kV transmission systems on the Great Northern Peninsula (GNP) and the Burin Peninsula, and the 138/66 kV transmission system serving the Doyles-Port aux Basques area, be assigned as common plant based on the presence of generation on each of these radial transmission lines that was of benefit to the entire grid. Hydro also proposed that the GNP generation be assigned as common.

19

In Order No. P.U. 7 (2002 - 2003), the Board did not approve the proposed assignment
of the generation and transmission assets on the GNP to common or the assignment of
the Doyles-Port aux Basques system to common. Instead, the Board ordered Hydro to
file, as part of its next GRA, a detailed study on the assignment of the GNP, the DoylesPort aux Basques and the Burin Peninsula assets.

1	In compliance with the Board's Order, Hydro filed, as Exhibit JRH-3 in this proceeding, a		
2	document entitled "Review of COS Assignment for the GNP, Doyles-Port aux Basques		
3	and Burin Peninsula Assets" (the "Review").		
4			
5	Based on the Review, Hydro has proposed the following assignments for cost of service		
6	purposes:		
7	Generation Assets:		
8	1. GNP – Change assignment from Hydro Rural to Common.		
9	2. Burin Peninsula – Assigned to Common (No change).		
10	Transmission assets:		
11	1. GNP – Specifically assigned to Hydro Rural (No change).		
12	2. Doyles-Port aux Basques – Specifically assigned to Newfoundland Power		
13	(No change).		
14	3. Burin Peninsula – Assigned to Common (No change).		
15			
16	Reference: Production Evidence, Haynes, p. 40, lines 14-28		
17			
18	For cost of service purposes, plant is either specifically assigned or assigned as		
19	common. Plant which is viewed as providing benefit to all customer classes is assigned		
20	as common. The costs related to specifically assigned plant are assigned to the		
21	appropriate customer class within the cost of service study. Cost of service plant		
22	assignments are not always clear-cut and require a balancing of various factors.		
23			

- 1 Reference: Transcript Haynes, October 23, 2003, p. 135, lines 7-9
- 2

3 **D.1.2** Assignment of Generation Assets

4	Hydro proposes to assign its generation assets on the GNP and Burin Peninsula as		
5	common on the basis that the physical location of generation assets is of little		
6	consequence. All generation assets connected to the Island Interconnected System		
7	provide benefits to all customers on the Island Interconnected System.		
8			
9 10 11	Reference: Transcript - Haynes, October 20, 2003, p. 183, line 19 to p. 186, line 1and p. 187, lines 6-18 Production Evidence, Haynes, Exhibit JRH-3, pp. 14-16		
12			
13	The Industrial Customers' cost of service experts, Mr. Osler and Mr. P. Bowman, take		
14	the position that Hydro's proposed assignment of generation assets to common reflect		
15	cost allocations that are not based on the relative benefits these assets provide to the		
16	various customer classes.		
17 18 19	Reference: Prefiled Testimony, Osler and P. Bowman, p. 3, lines 27-29		
20	The relative benefits to various customer classes of the generation assets on the three		
21	radial systems may differ due to their locations near certain customer classes' load		
22	centers. However, all generation assets on the Island Interconnected System, including		
23	the assets in question, benefit all customers by deferring capacity additions to the		
24	system, regardless of their location. If the generation on the three radial systems were		

1	removed, Hydro would be required to obtain additional generation for 2004 in order to		
2	meet its system reli	ability criterion for capacity of no more than 2.8 LOLH per year. With	
3	this generation in place, the system reliability criterion for capacity is not exceeded until		
4	2011. Recent events on the Island Interconnected System have also demonstrated the		
5	benefits of the generation in meeting system peak requirements and assisting in system		
6	restoration efforts.		
7			
8 9 10 11 12 13 14	Reference:	Production Evidence, Haynes, Exhibit JRH-3, pp. 10-13 and pp. 15-16 Transcript - Haynes, October 20, 2003, p. 55, line 10 to p. 57, line 10 and p. 182, line 4 to p. 193, line 2 Cost of Service Evidence, Greneman, p.10, lines 6-7 Transcript - Haynes, October 24, 2003, p. 49, line 6 to p. 53, line 21	
15			
16	Newfoundland Power submits that all generation assets connected to the Island		
17	Interconnected System provide substantial benefit to the Island Interconnected		
18	System. Accordingly, Newfoundland Power supports Hydro's proposal that the		
19	generation assets	on each of the two systems be assigned to common.	
20			
21	D.1.3 Assignmen	t of Transmission Assets	
22	Hydro proposes that	at there be no change in the assignment of the transmission assets in	
23	question and that e	ach remains assigned in the same manner as approved in the 2002	
24	test year. The prop	oosals are in accordance with the guidelines that have been	

25 developed for the assignment of transmission assets for cost of service purposes.

Based on the Review, Hydro also concludes that it is appropriate to assign generation		
assets and the connecting transmission and terminal station assets differently for cost of		
service purposes.		
Reference: Production Evidence, Haynes, Exhibit JRH-3, pp. 19-20		
D.1.3.1 Assignment of the GNP and Doyles-Port aux Basques Transmission Assets		
The St. Anthony/Roddickton portion of the GNP transmission system was constructed		
for the benefit of the customers on the previously isolated distribution system on the		
GNP. According to the Review, the generation assets on the GNP are not of sufficient		
magnitude to justify assignment of the GNP transmission assets as common, given that		
the dominant purpose of the transmission system is to serve a single customer class.		
Reference: Production Evidence, Haynes, Exhibit JRH-3, p. 21		
The primary purpose of the Doyles-Port Aux Basques transmission assets is to provide		
service to Newfoundland Power customers on that radial system. According to the		
Review, the generation assets located on this radial system are not sufficient in		
magnitude to justify assignment of the transmission assets as common, given that the		
dominant purpose of the transmission system is to serve a single customer class.		
Reference: Production Evidence, Haynes, Exhibit JRH-2, p. 21		

1	Mr. Osler and Mr. P. Bowman take no issue with the proposed specific assignment of		
2	the transmission assets serving Doyles-Port aux Basques and the GNP.		
3			
4	The position of the Board Staff's cost of service experts, EES Consulting, Ms. Tabone		
5	and Mr. Chymko, is that the transmission facilities should be treated the same as the		
6	associated generation facilities, given that all customers on the grid benefit from the		
7	generation that is connected. This position derives from their view that the transmission		
8	system is essentially an extension of the production system and their preference for a		
9	"postage stamp" policy for the assignment of generation and transmission facilities.		
10			
11 12 13	Reference: Evidence, EES Consulting: Cost of Service and Rates, pp. 18-19 Transcript - Chymko and Tabone, November 19, 2003, p. 17, line 14 to p. 19, line 23 and p. 109, line 8 to p. 113, line 18		
14			
15	D.1.3.2 Assignment of the Burin Transmission Assets		
16	Hydro has proposed that the Burin Peninsula transmission assets continue to be		
17	assigned as common. Hydro's guideline for the assignment of transmission assets		

- 18 provides for assignment as common where the assets are associated with the
- 19 connection of two or more customer classes to the grid and there is significant
- 20 generation that is of benefit to the grid. The Burin Peninsula transmission assets (TL-
- 21 212 and TL-219) serve both the Newfoundland Power and Hydro Rural customer
- 22 groups and connect generation assets of Newfoundland Power (26.7 MW) and Hydro
- 23 (8 MW) to the grid. In addition, there is a likelihood that a wind generation project will
- 24 provide an additional 25 MW of generation in the near future.

1 2 3	Reference:	Production Evidence, Haynes, Exhibit JRH-3 Transcript - Haynes, October 21, 2003, p. 19, lines 3-19 and p. 22, line 20 to p. 24, line 1
4		
5	Mr. Osler and Mr. P.	Bowman are of the opinion that assigning Burin transmission
6	assets to common is	inappropriate because the assets do not serve the Industrial
7	Customers. They su	uggest that the assets should be assigned jointly to Newfoundland
8	Power and Hydro Ru	ural.
9		
10 11	Reference:	Prefiled Testimony, Osler and P. Bowman, p. 3, lines 27-29 and Attachment H, p. H-3, lines 13-15
12		
13	There is currently no	Newfoundland Power-Hydro Rural category of cost assignment.
14	More importantly, assignment of the Burin transmission assets to Newfoundland Power	
15	and Hydro Rural would not reflect the benefits to the main grid of the significant	
16	generation on the Burin Peninsula.	
17		
18 19	Reference:	Transcript - Haynes, October 23, 2003, p. 141 line 16 to p. 142, line 14
20		
21	Mr. Osler and Mr. P. Bowman's evidence states that considering the generation on the	
22	Burin Peninsula for common assignment of the transmission lines only has merit in	
23	relation to transmission line TL-212, based on the location of the Paradise River plant.	
24		
25 26	Reference:	Prefiled Testimony, Osler and P. Bowman, Attachment H, p. H-4, lines 12-13

However, this approach ignores the benefit of the alternative routes provided by the two
 transmission lines to:

3	(i)	the Newfoundland Power and Hydro Rural customers on the Burin Peninsula	
4		with respect to supply from the main grid; and	
5	(ii)	other customers supplied from the main grid with respect to the available	
6		generation on the Burin Peninsula.	
7			
8	Neither Mr. D. Bowman nor EES Consulting disagreed with the cost assignment		
9	proposed for the Burin Peninsula transmission assets.		
10			
11 12 13	R	eference: Prefiled Evidence, C. D. Bowman, p. 7, lines 11-17 Evidence, EES Consulting: Cost of Service and Rates, p. 19, lines 3-8	
14			
15	Newfou	ndland Power submits that Hydro's proposals with respect to the	
16	assignment of the GNP, Doyles-Port aux Basques and Burin Peninsula		
17	transmission assets for cost of service purposes are reasonable and reflect the		
18	balance	of the information provided on this issue.	
19			
20	D.2 G	eneration Credit	
21	D.2.1 G	eneral	
22	Within H	ydro's Cost of Service Study, costs are allocated based on Newfoundland	
23	Power's	native peak demand less the amount of generation Newfoundland Power has	
24	available	to Hydro on request. The amount of the demand reduction is referred to as	

1	the generation credit. The current generation credit of 125.4 MW is based on		
2	Newfoundland Power's thermal and hydraulic generation capacity less a 16% reserve.		
3			
4 5 6	Reference: Cost of Service Evidence, Greneman, Exhibit RDG-2, p.7 IC-306 NLH NP-215 NLH		
7			
8	When necessary, Hydro can request Newfoundland Power to run its thermal generation		
9	and maximize hydraulic generation. Coordination between the two utilities results in		
10	Newfoundland Power not running its thermal generation when Hydro has other lower		
11	cost generation available. This promotes the least cost operation of the thermal		
12	generating facilities on the Island Interconnected System and ensures overall efficiency		
13	of operations in accordance with Section 3(b)(i) of the Electrical Power Control Act,		
14	1994. The provision of the generation credit through the cost of service study provides		
15	fairness to Newfoundland Power and its customers and the achievement of this		
16	mandate.		
17			
18 19 20 21 22 23 24 25	Reference: Transcript - Perry and Henderson, December 9, 2003, p. 105, line 19 to p.106, line 20 Cost of Service Evidence, Greneman, Exhibit RDG-2, pp. 6-7 Transcript - Haynes, October 20, 2003, p. 51, lines 15-23 Prefiled Supplementary Evidence, Brockman, p.7, lines 19-22 NLH-228 NP		
26	Mr. Osler and Mr. P. Bowman recognized that the consideration for Newfoundland		
27	Power's generation through the cost of service study should first recognize the clear		
28	power policy of Section 3(b) of the Electrical Power Control Act, 1994.		

1 2	Reference: Prefiled Testimony, Osler and P. Bowman, p. 45, line 40 to p. 46, line 3		
3			
4	As a result of this arrangement between Newfoundland Power and Hydro on the		
5	operation of Newfoundland Power's generation, the peak demand assigned to		
6	Newfoundland Power through Hydro's cost of service study is net of Newfoundland		
7	Power's generation capacity less reserve. This is no different than the peak demands	in	
8	the cost of service study for Corner Brook Pulp and Paper being based on its demand		
9	requirements net of its generation.		
10			
11 12 13	Reference: Prefiled Supplementary Evidence, Brockman, p. 7, line 19 to p. 8, line 8 NP-226 IC		
14			
15	The Board reviewed the treatment of Newfoundland Power's generation credit in		
16	Hydro's Cost of Service Study at both the 1992 Cost of Service Hearing and the 2001		
17	Hydro General Rate Proceeding. On both occasions, the Board accepted the current		
18	Cost of Service methodology for dealing with the generation credit.		
19			
20	Reference: Prefiled Supplementary Evidence, Brockman, p. 5, lines 14-17		
21			
22	D 2.2 Position of Parties		
23	Hydro's position is that all generation facilities on the Island Interconnected System,		
24	including those owned by Newfoundland Power, defer the need to add new generation		
25	to meet capacity requirements and assist in system restoration efforts. The generation	i	

1	credit is a recognition of the capacity value of the Newfoundland Power generation to
2	the system. IC-306 NLH indicates the capacity value of the generation credit is 125.4
3	MW.
4	
5 6 7 8 9	Reference: Production Evidence, Haynes, Exhibit JRH-3, Section 3 Prefiled Supplementary Evidence, Brockman, p. 8, lines 10-16 Cost of Service Evidence, Greneman, Exhibit RDG-2, p. 6
10	Based on his review of Hydro's evidence, Newfoundland Power's cost of service expert,
11	Mr. Brockman, supports continuation of the generation credit consistent with the
12	recommendations of Order No. P.U. 7 (2002-2003).
13 14 15 16	Reference: Prefiled Supplementary Evidence, Brockman, p. 8, lines 10-21
17	Mr. Osler and Mr. P. Bowman suggest that a generation credit for Newfoundland
18	Power's thermal generation is not warranted because the Island Interconnected System
19	is in a "situation of excess capacity until 2011". Mr. Osler and Mr. P. Bowman also
20	expressed concern over the mathematical results of the treatment of the generation
21	credit through the cost of service study. Mr. Osler and Mr. P. Bowman testified the
22	Industrial Customers are paying too much for the thermal generation of Newfoundland
23	Power.
24	

25

1 2 3 4 5 6 7 8	Reference:	Prefiled Testimony, Osler and P. Bowman, p. 24, lines 32 to p. 25, line 2 p. 28, lines 24-26 p. 29, line 1 p. 37, lines 25 to p. 38, line 14 Transcript - Osler and P. Bowman, November 13, 2003, p. 46, line 3 to p. 48, line 1
9	Mr. Haynes did no	ot agree that the system is in a state of excess capacity. All
10	generation connect	cted to the Island Interconnected System, regardless of location,
11	assists in meeting	Hydro's capacity criteria and benefits the system. As recently as
12	September 2003,	Newfoundland Power has been required to start its gas turbines for
13	system purposes.	
14		
15 16 17 18 19 20	Reference:	Transcript - Haynes, October 21, p. 17, lines 23-25 Testimony, Haynes, October 20, 2003, p. 187, lines 9-18 Production Evidence, Haynes, Exhibit JRH-3, p. 15 Testimony, Haynes, October 23, 2003, p. 24, line 21 to p. 25, line 9
21	Generation and tra	ansmission additions provide blocks of increased capacity to the
22	system. The size	of the block depends on the resource being utilized. It is often the
23	case that a system	n will have more or less than the exact amount of generation needed
24	at any given point	in time. All generation currently on the system (including that owned
25	by Newfoundland	Power) provides a benefit to all customers on the system.
26		
27 28	Reference:	Prefiled Supplementary Evidence, Brockman, p. 6, lines 5-13 Transcript - Haynes, October 20, p. 53, line 24 to p. 56, line 3
29		

Mr. Osler and Mr. P. Bowman's mathematical results are a recalculation of the cost of
 service study based on removing the generation credit associated with Newfoundland
 Power's thermal generation. This is equivalent to assuming Newfoundland Power did
 not own its 43.9 MW of thermal generation.

5

6 The reality is Newfoundland Power does own 43.9 MW of thermal generation that 7 reduces the load requirements that Hydro must supply for Newfoundland Power. 8 Consequently, the generation credit reflects the fact that Hydro does not have to serve 9 that load. Therefore, the basis for Mr. Osler's and Mr. P. Bowman's claims does not 10 represent the reality of the Island Interconnected System. Newfoundland Power has 11 thermal generation that reduces the peak requirements to be provided by Hydro. 12 However, Newfoundland Power only operates these facilities for system requirements 13 when required to do so by Hydro in compliance with the *Electrical Power Control Act*, 14 1994, Section 3(b)(i).

15

The claim that the Industrial Customers are paying for Newfoundland Power's
generation is incorrect. Newfoundland Power's customers pay for Newfoundland
Power's generation. If Newfoundland Power's peak demands in Hydro's cost of service
study were not reduced by the generation capabilities of Newfoundland Power, the
customers of Newfoundland Power would also be paying Hydro for Newfoundland
Power's generation through higher purchased power expense.

22

Reference: Prefiled testimony - Osler and P. Bowman, p. 30, footnote 101
 IC-187 NP

1	Mr. Chymko and Ms	5. Tabone agreed with the generation credit, but disagreed with
2	reducing the peak d	emand for allocating transmission costs within the cost of service
3	study. They appear	red to recommend the credit be valued as a tariff outside the cost of
4	service study.	
5		
6 7 8 9	Reference:	Transcript - Chymko and Tabone, November 19, 2003, p. 156, lines 23-25 and p. 157, lines 23-25
10	The recommendation	on of Mr. Chymko and Ms. Tabone that Newfoundland Power should
11	not receive a credit	for allocating Hydro's transmission portion of Hydro's demand costs
12	appears to be based	d on an assumption that Newfoundland Power's generating units are
13	physically located in	Hydro's service territory. That assumption is incorrect.
14		
15 16 17	Reference:	Evidence, EES Consulting: Cost of Service and Rates, p. 30, lines 7-13 Prefiled Supplementary Evidence, Brockman, p. 6, lines 17-18
18		
19	Both the hydraulic a	nd thermal generation of Newfoundland Power reduce the demand
20	requirements that ex	xist on Hydro's system.
21		
22 23	Reference:	Transcript - Perry and Henderson, December 9, 2003, p. 103, lines 15-19
24		
25		

1	Newfou	ndland Power submits that
2	(i)	Newfoundland Power's thermal and hydraulic generation play an
3		important role in Hydro's generation planning and system operations;
4	(ii)	The peak demands used in Hydro's cost of service should be net of the
5		capacity Newfoundland Power provides to the Island Interconnected
6		System; and
7	(ii)	The Board should approve the continuation of the generation credit to
8		Newfoundland Power, consistent with the Board's determination in
9		Order No. P.U. 7 (2002-2003).
10		
11	D.3 R	eview of Test Year Load Forecasts
12	Mr. Osle	r and Mr. P. Bowman make the following recommendation:
13 14 15 16	"N th re	IP load forecasts need to be reviewed further in the proceeding to assess e extent to which NP's peak demands as currently forecast result in a asonable allocation of demand costs"
17 18	R	eference: Prefiled Testimony, Osler and P. Bowman, p. 3, lines 30-34
19	Section	3(a)(ii) of the <i>Electrical Power Control Act, 1994</i> provides that rates to be
20	charged	for the supply of power within Newfoundland and Labrador should be
21	establish	ned, where practicable, based on forecast costs.
22		
23	Hydro's	proposed test year cost of service study is provided on a forecast basis. Rates
24	and cost	allocations are based on "expected" or "normal" test year conditions. The idea
25	of being	over-charged due to forecast variances is inconsistent with the basing of rates

1	on a forecast test year rather than an historic test year. However, all customer load
2	forecasts should be reviewed in a rate case, since they are an important component of
3	the cost of service and rate design.
4	
5	Reference: Prefiled Supplementary Evidence, Brockman, pp. 9-10
6	
7	Newfoundland Power is not the end user of the energy it purchases and the accuracy of
8	its demand forecast is significantly affected by the actual weather conditions
9	experienced during the winter season. It is not possible to accurately predict when a
10	demand peak will occur.
11	
12 13 14 15 16	Reference: Transcript - Henderson and Perry, December 9, 2003, p. 115, line 5 to p. 116, line 17 Transcript - Haynes, November 12, 2003, p. 189, lines 6-20
17	A comparison of historic forecast demands and actual demands shows that there is no
18	pattern in the annual variances from Newfoundland Power's demand forecast.
19	
20	Reference: IC-155 NLH
21	
22	Following the large forecast variance from the 2002 test year forecast, Newfoundland
23	Power and Hydro agreed on a revised forecast methodology to reflect a longer historic
24	period to provide a reasonable estimate of an expected peak. Basing the demand

1	forecast on a 15-ye	ar average of load factor is a reasonable basis for demand
2	forecasting.	
3		
4 5 6 7 8	Reference:	Transcript - Henderson, December 9, 2003, p. 118, line 25 to p. 119, line 16 Transcript - Haynes, November 12, 2003, p. 195, lines 3-10
9	Newfoundland Po	wer submits that its demand forecast for the 2004 Test Year is
10	reasonable.	

1 E. WHOLESALE RATE STRUCTURE

2 E.1 General

3 Newfoundland Power has been billed on an energy-only wholesale rate structure since 4 the 1960's. In the late 1980's, Newfoundland Power raised a concern about the 5 wholesale rate structure in the face of a forecast capacity constraint. At the time, 6 Newfoundland Power believed that a change to a demand/energy wholesale rate could 7 provide benefits to help avoid the significant demand growth that was forecast for the 8 Island Interconnected System. In the early 1990's, demand growth on the system 9 slowed significantly. 10 11 Newfoundland Power and Hydro have not been able to reach agreement on a change 12 to a demand/energy wholesale rate. 13 At the 2001 Hydro GRA, Newfoundland Power and Hydro agreed that the energy-only 14 15 wholesale rate was an acceptable rate structure and proposed that it be maintained. In 16 Order No. P.U. 7 (2002-2003), the Board ordered that additional evidence be filed on 17 the wholesale rate structure at Hydro's next rate hearing. 18 19 Hydro has presented the current application on the basis of an energy-only rate to 20 Newfoundland Power. However, Hydro is recommending that the Board approve the

- 21 implementation of a demand/energy wholesale rate structure for Newfoundland Power
- 22 once a number of implementation issues are resolved. Hydro's consultant, Mr.

1	Greneman acknowledges that the energy-only rate remains a viable option, but believes
2	that there are benefits to changing to a demand/energy rate structure.
3	
4 5	Reference: Rates and Customer Services Evidence, Banfield, p. 3, lines 3-27 Cost of Service Evidence, Greneman, p. 14, lines 3-11
6	
7	Hydro has proposed that the Sample Rate, originally developed by Mr. Greneman for
8	illustrative purposes, be adopted as the wholesale rate ("Sample Rate").
9	
10	The following section is a review of the characteristics of the Island Interconnected
11	System that are relevant to an understanding of the strengths and weaknesses of the
12	wholesale rate options presented to the Board in this proceeding.
13	
14	E.2 Characteristics of the Island Interconnected System
15	The Island Interconnected System is predominantly a hydroelectric system with the
16	remaining generation for the system being substantially provided by the thermal steam
17	system at Holyrood. The Holyrood thermal system and the hydroelectric production
18	facilities on the Island are used for supplying base and peak loads. Since 1998 Hydro
19	has supplemented its supply with non-utility generation (predominantly hydroelectric).
20	The gas turbines and diesel units on the system are used primarily for emergency
21	situations and supplying peaking capacity.

Hydro operates its production facilities to minimize costs and to ensure appropriate
security of supply. Hydro varies the production levels at Holyrood according to the
hydrological conditions on the Island to ensure adequate supply is available.
Reference: Production Evidence, Haynes, p. 5, line 10 to p. 7, line 10
E.2.1 System Planning and System Expansion
Decisions as to when generation additions are required are based on two criteria:
forecast energy shortage and forecast capacity shortfall.
Forecast energy shortages are determined based on Hydro's firm energy criterion.
Hydro bases its firm energy capability on the estimated amount of energy that could be
produced during the lowest three-year sequence of water flows on record (i.e., mid to
late 1950's). If the forecast energy requirements for a future year are greater than the
firm energy capability, then Hydro's firm energy criterion is violated. Hydro must then
evaluate options to deal with the forecast energy shortage.
Hydro uses a probabilistic approach to determine if enough capacity exists on the
system. Hydro analyzes the forced outage rates on the generating equipment in
conjunction with the load forecast to ensure that there will be enough capacity to serve
total customer loads with the exception of 2.8 hours per year. If the forecast for a future
year indicates the loss of load hours (LOLH) will exceed 2.8 hours per year, Hydro must
determine how to deal with the forecast capacity shortfall. The LOLH estimate is

1	affected by a number of factors, including changes in load factor, load shape and the
2	forced outage rate of the generators.
3	
4	Hydro's energy forecast exceeds the firm energy capability of the Island Interconnected
5	System in 2009. Hydro's capacity planning criterion does not show a deficit until 2011.
6	
7 8 9 10 11 12 13 14 15	Reference: Transcript - Haynes, October 20, 2003, p. 138, line 23 to p. 142, line 18 and p. 144, line 19 to p. 145, line 18 Production Evidence, Haynes, p. 37, Table 8 and Schedule II Transcript - Haynes, October 20, 2003, p. 145, line 19 to p. 147, line 11 IC-392 NLH Transcript - Haynes, November 12, 2003, p. 199, line 14 to p. 200, line 8
16	Because the next plant addition is required to meet both demand and energy
17	requirements, implementing a substantial demand reduction program with no
18	associated energy reduction (similar to interruptible load or hot water tank control
19	programs) would not defer the next plant addition.
20	
21 22 23 24	Reference: NP-154 NLH Production Evidence, Haynes, p. 37, Table 8 Transcript - Chymko, November 19, 2003, p. 93, line 23 to p. 94, line 12
25	
26	Hydro did not renew the Interruptible B contract with Abitibi Stephenville priced at
27	\$28.20 per kW, when it expired in the spring of 2003. It is Hydro's assessment that the
28	capacity deficit forecast for 2011 would not be impacted if the Interruptible B contract
29	were continued, and the LOLH would only improve marginally for the prior years.

1	The minimal impact of 46 MW of interruptible load on the system expansion plan
2	appears to be related to the frequency and number of hours the demand reduction
3	could be utilized. As a result, the LOLH calculation used in determining when a
4	capacity shortfall is experienced will not be significantly impacted by demand reduction
5	programs that only impact system peak and have a minimal impact on energy usage.
6	
7	Consequently, DSM programs that reduce both demand and energy requirements
8	would appear to provide the most benefit in deferring plant additions.
9	
10 11 12 13 14 15	Reference: NP-136 NLH IC-194 NLH NP-140 NLH Production Evidence, Haynes, p. 37, Table 8 Transcript - Haynes, October 21, 2003, p. 50, lines 15-23 Transcript - Banfield, December 2, 2003, p. 84, lines 6-11
16 17	E.2.2 System Marginal Costs
18	Short-run marginal costs are the variable costs of production, namely fuel and variable
19	operating and maintenance expenses. Determining long-run marginal costs requires a
20	calculation of changes in system costs that result from changes in the system
21	expansion plan.
22	
22	Reference: Prefiled Evidence Brockman p 7 line 8 to p 8 line 3 and p 9
23 24	line 10 to p. 10, line 11

1 E.2.2.1 Short-run Marginal Costs

2	Any reduction in energy usage at a given time of the year, either winter or summer,
3	saves reservoir water, resulting in less use of oil at Holyrood. Therefore, the short-run
4	marginal cost on the Island Interconnected System all year-round is the variable cost of
5	production at Holyrood. The 2004 forecast of the short-run marginal production cost on
6	the Island Interconnected System is 5.13 ¢ per kWh (i.e., the Holyrood test year fuel cost
7	plus variable operating and maintenance expense).
8	
9	In the short-term, an increase or a decrease in the peak demand of Newfoundland
10	Power or Industrial Customers does not result in an increase or decrease in Hydro's
11	annual costs.
12	
13 14 15 16 17	Reference: IC-127 NLH, p. 29, paragraph 5 Transcript - Haynes, October 20, 2003, p. 167, line 8 to p. 168, line 5 and p. 165, lines 2-5 NP-130 NLH Prefiled Evidence, Brockman, Exhibit LBB-2, p. 9
18	
19	E.2.2.2 Long-run Marginal Costs
20	Hydro has not conducted a long-run marginal cost study since 1984. Because Hydro
21	did not participate in the marginal cost study conducted by Newfoundland Power in
22	1997, an equivalent peaker approach was used by Newfoundland Power to calculate
23	the long-run marginal generation demand costs on the system. The NARUC Manual
24	states that on a predominantly hydraulic system, the long-run marginal generation cost
25	of demand may be very low. Consequently, the equivalent peaker methodology may

1	not appropriately reflect the marginal generation demand costs on the Island	
2	nterconnected System. At the time of filing its marginal cost study with the Board,	
3	Newfoundland Power informed the Board it was not comfortable with its estimate of the	
4	marginal generation demand costs.	
5		
6 7 8 9 10	Reference: Transcript - Brockman, November 18, 2003, p. 139, lines 9-19 CA-235 NLH, transmittal letter Prefiled Evidence, Brockman, p. 10, lines 1-4 and p. 14, lines 7-9 CA-235 NP, Appendix B of Report, NARUC Cost of Service Manual, p. 115, footnote 7	
11		
12	The most recent generation plant constructed by Hydro was Granite Canal. The energy	
13	generated by Granite Canal is reducing the energy that is required to be generated at	
14	Holyrood. Holyrood fuel is strictly an energy cost. Since the annual cost of Granite	
15	Canal and the cost of Holyrood fuel are approximately the same on a cents per kilowatt	
16	hour basis, the long-run marginal cost of demand related to Granite Canal is	
17	approximately zero.	
18		
19	Determining long-run incremental costs on the Island Interconnected System requires	
20	sophisticated computer studies that vary the future demand and energy on the system	
21	o determine changes in system costs. For the Island Interconnected System, only	
22	Hydro has the information and tools required to accurately perform this type of study.	
23		
24		

1	The follo	wing system characteristics are relevant in reviewing the wholesale rate issue:	
2	(i)	the next unit of generation on the system is required to serve both energy and	
3		demand;	
4	(ii)	there is no capacity shortfall projected until 2011;	
5	(iii)	the long-run marginal demand cost of Granite Canal was approximately zero;	
6		and	
7	(iv)	Hydro is currently not willing to pay \$28.20 per kW for interruptible load.	
8			
9	Taken to	gether, these support Mr. Brockman's claim that the current long-run marginal	
10	generation demand cost is probably between \$0.00 and \$28.20 per kW per year.		
11			
12 13	R	eference: Transcript - Brockman, November 18, 2003, p. 139, lines 9-19 Production Evidence, Haynes, p. 37, Table 8	
14			
15	The follo	wing section is a review of the evidence regarding the performance of the	
16	existing	energy-only wholesale rate.	
17			
18	E.3 T	he Energy-Only Wholesale Rate	
19	E.3.1 In	npact on System Expansion	
20	Newfour	Indland Power has been subject to an energy-only wholesale rate structure since	
21	it began	purchasing power from Hydro in the 1960's. No evidence was presented	
22	during th	e hearing to suggest that demand growth has been higher as a result of the	
23	existence	e of the energy-only wholesale rate.	
24			

1	Since 1980, all of Hydro's new plant additions on the Island Interconnected System
2	have been hydraulic, and Hydro has not built any thermal generation solely to supply
3	peak demand growth. Therefore, since 1980, all generation constructed by Hydro has
4	been to serve the energy requirements and the demand requirements of its customers.
5	
6 7	Reference: Transcript - Haynes, October 20, 2003, p. 142, line 19 to p. 144, line 9
8	
9	The system load factor has increased since 1990 and is forecast to remain stable. No
10	evidence was presented to indicate that the energy-only wholesale rate is negatively
11	impacting the efficient use of electricity on the Island Interconnected System.
12	
13 14	Reference: Production Evidence Haynes, p. 37, Table 8 Prefiled Evidence, Brockman, Exhibit LBB-3
15	
16	E.3.2 Collection of Revenue Requirement
17	Hydro faces no risk in collecting its revenue requirement from Newfoundland Power
18	under the energy-only rate structure. Any earnings shortfall or earnings gain by Hydro
19	resulting from variances from test year forecast revenue from Newfoundland Power is
20	either recovered or credited to the Rate Stabilization Plan (RSP) through the load
21	variations component.
22	
23 24 25 26	Reference: Prefiled Evidence, Brockman, p. 4, line 21 to p. 5, line 3 PUB-154 NLH Transcript - Banfield, December 2, 2003, p. 67, lines 18-21

1 E.3.3 Fairness

2 "Fairness is generally judged by a cost of service standard. That is, if 3 customers are charged what it costs to serve them, they are being treated 4 fairly." 5 6 Reference: Prefiled Evidence, Brockman, p. 5, lines 16-17 7 8 The Industrial Customer class is comprised of several customers, each an end-user 9 with a certain degree of control over its own operating characteristics, and its demand 10 and energy requirements. To ensure intra-class fairness and efficiency, it is necessary 11 to charge these customers on a rate structure that reflects demand, energy and 12 customer components. 13 14 Newfoundland Power is not an end-user. Newfoundland Power is the only utility in its 15 customer class. Its usage characteristics are well known by Hydro. The total revenue 16 requirement apportioned to Newfoundland Power through the cost of service study is 17 effectively recovered by Hydro through the energy-only wholesale rate. 18 19 The revenue requirement from the Industrial Customers is also determined from the 20 cost of service study. It is not affected by the structure of the wholesale rate to 21 Newfoundland Power. Since total revenue requirements are apportioned to the 22 Industrial Customers and Newfoundland Power directly from the cost of service study. 23 Newfoundland Power's wholesale rate structure is not a factor in the fairness of cost 24 recovery between the two customer classes.

25

1 2	Reference:	Prefiled Evidence, Brockman, p. 6, lines 15-18; Cost of Service Evidence Greneman, Exhibit RDG-2, p. 4	
3			
4	Mr. Chymko testified	d that one reason supporting a change to a demand/energy	
5	wholesale rate is an	issue of fairness in relation to the Hydro Rural Interconnected	
6	customers. Mr. Chy	who testified that the Hydro Rural customers are not being treated	
7	fairly because Newf	oundland Power is being billed on the energy-only wholesale rate.	
8			
9	The Hydro Rural Int	erconnected customers are billed on the retail rates of	
10	Newfoundland Powe	er. The Hydro Rural Interconnected customers pay approximately	
11	64% of the annual o	ost to serve them. Given that the customers of Newfoundland	
12	Power pay most of t	the revenue shortfall, it is difficult to accept or understand the	
13	argument that the H	ydro Rural customers are not being treated fairly in relation to	
14	Newfoundland Power.		
15			
16 17 18 19 20 21	References:	Transcript - Chymko, November 19, 2003, p. 56, line 19 to p. 57, line 5 Cost of Service Evidence, Greneman, Exhibit RDG-1, 2 nd Revision, p. 3 of 107, line 6, column 7 Rates and Customer Service Evidence, Banfield, 2 nd Revision, p. 6, lines 24-26	
22			
23	E.3.4 Efficiency in	System Operations	
24	Newfoundland Powe	er's generation plants are dispatched for overall system	

- 25 requirements through the coordinated efforts of Newfoundland Power's control centre
- and Hydro's control centre. This coordinated approach to managing the generation

1	resources on the Island Interconnected System promotes least cost operation of the			
2	generating facilities on the Island Interconnected System and ensures overall efficiency			
3	of operations.			
4				
5	The use of the energy-only wholesale rate is not incompatible with the efficient			
6	operation of the Newfoundland Power generation facilities for the benefit of the Island			
7	Interconnected System. Newfoundland Power and Hydro operate similar to an			
8	integrated utility from a system operations perspective.			
9				
10 11 12 13 14 15 16 17	Reference: Transcript - Perry and Henderson, December 9, 2003, p. 105, line 19 to p. 106, line 20 Prefiled Supplementary Evidence, Brockman, p. 7, lines 19-22 Cost of Service Evidence, Greneman, Exhibit RDG-2 Transcript - Haynes, October 20, 2003, p. 51, lines 15-23 Transcript - Henderson, December 9, 2003, p. 51, lines 15-23			
18	E.3.5 Proper Price Signals to Customers			
19 20	E.3.5.1 The Price Signal to Retail Customers			
21	The price signal to all retail customers on the Island Interconnected System, other than			
22	the Industrial Customers, is provided by the rates approved for Newfoundland Power.			
23	Newfoundland Power's rate designs reflect Island Interconnected System costs and are			
24	not influenced by the form of the wholesale rate.			
25				
26	The two main inputs in designing Newfoundland Power's rates are the system's			
27	embedded costs and the system's short-run marginal costs. Newfoundland Power uses			
28	Hydro's split of demand and energy costs in its cost of service study to ensure fairness			

n recovering its pur rate itself is not a fa Demand charges a Power prices the ta producing that ene customers. Reference:	actor that is considered in designing retail rates. are applied to customers where it is practical to do so. Newfoundland ail-block energy rates to reflect the short-run marginal costs of rgy. This approach provides an efficient price signal to retail
rate itself is not a fa Demand charges a Power prices the ta producing that ene customers. Reference:	actor that is considered in designing retail rates. The applied to customers where it is practical to do so. Newfoundland ail-block energy rates to reflect the short-run marginal costs of rgy. This approach provides an efficient price signal to retail
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Demand charges a Power prices the ta producing that ene customers. Reference:	are applied to customers where it is practical to do so. Newfoundland ail-block energy rates to reflect the short-run marginal costs of rgy. This approach provides an efficient price signal to retail Prefiled Evidence. Perry and Henderson, p. 6, line 13 to p. 8
Power prices the ta producing that ene customers. Reference:	ail-block energy rates to reflect the short-run marginal costs of rgy. This approach provides an efficient price signal to retail
producing that ene customers. Reference:	rgy. This approach provides an efficient price signal to retail Prefiled Evidence, Perry and Henderson, p. 6, line 13 to p. 8
customers. Reference:	Prefiled Evidence, Perry and Henderson, p. 6, line 13 to p. 8
Reference:	Prefiled Evidence, Perry and Henderson, p. 6, line 13 to p. 8
Reference:	Prefiled Evidence Perry and Henderson, p. 6, line 13 to p. 8
	Prefiled Evidence, Brockman, p. 1, lines 19-21 and p. 17, lines 10-22
Mr. D. Bowman be	lieves Newfoundland Power should offer rate options to its
customers. Mr. D.	Bowman and Mr. Brockman agree that a marginal cost study and
etail rate design s	tudy are required. These studies would assist Newfoundland Power
and the Board in e	valuating the efficiency of the current retail rate designs and in
determining wheth	er any cost effective rate options should be offered to retail
customers on the I	sland Interconnected System.
Mr. Brockman and	EES Consulting agreed that the marginal cost study and retail rate
	d be a joint effort of Hydro and Newfoundland Power. Newfoundland
design study shoul	
design study shoul Power's marginal c	costs also impact retail rates.
١	/Ir. Brockman and lesign study shoul
1	The current price signal being provided by Newfoundland Power's rates to customers
-----------------------	--
2	on the Island Interconnected System is not based on the wholesale rate but on the best
3	available system cost information.
4	
5 6 7 8 9	Reference: Prefiled Evidence, C. D. Bowman, p. 3 and p. 11, line 16 to p. 12, line 4 Prefiled Supplementary Evidence, Brockman, pp. 2-3 Transcript - Chymko, November 19, 2003, p. 47, line 13 to p. 48, line 14
10	
11	E.3.5.2 The Price Signal to Newfoundland Power
12	Economists generally agree that for efficiency the incremental price for a commodity
13	should not be less than the cost of producing it. The energy-only wholesale rate
14	proposed in this proceeding is 5.46 ϕ /kWh. This is slightly above the short-run marginal
15	cost of 5.13 ϕ /kWh. Therefore, the proposed energy-only rate promotes efficiency. The
16	energy-only rate also prices incremental energy usage the same for all months of the
17	year. This makes economic sense since the short-run marginal cost of energy on the
18	Island Interconnected System is the same for all months of the year.
19	
20 21 22	Reference: Prefiled Evidence, Brockman, p. 15, lines 6-16 Transcript - Haynes, October 20, 2003, p. 167, line 8 to p. 168, line 5
23	
24	The report of Hydro's cost of service expert, Mr. Greneman, provided as Exhibit RDG-2
25	entitled "Review of Rate Design for Newfoundland Power" (the "Greneman Report")
26	which recommends a demand/energy wholesale rate, acknowledges that the energy-

1	only rate provides both an energy price signal and a demand price signal to
2	Newfoundland Power. The demand price signal is provided because Newfoundland
3	Power is aware that its peak load is a key driver of the cost that is allocated to it.
4	
5	Reference: Cost of Service Evidence, Greneman, Exhibit RDG-2, p. 4
6	
7	E.3.6 Cost Effective Demand Side Management
8	DSM programs that result in higher rates over the long-term should not be implemented.
9	This criterion is referred to as the Rate Impact Measure test. Proving that cost-effective
10	DSM programs exist is a complicated undertaking. Mr. Brockman's Exhibit LBB-4
11	discusses the methods for evaluation of DSM programs.
12	
13	Reference: NP-167 NLH
14	
15	In Order No. P.U. 19 (2003) following Newfoundland Power's GRA, the Board made the
16	following observations on DSM:
17 18 19 20 21 22 23 24	"The Board finds it difficult, however, to provide specific and meaningful policy direction to the utilities on DSM and conservation issues in the absence of supporting evidence and related impacts on the system overall. This matter would be most appropriately addressed in the context of a generic hearing involving both utilities and interested parties."
25	Newfoundland Power agrees that determining a policy direction on DSM is complex and
25 26	Newfoundland Power agrees that determining a policy direction on DSM is complex and is best dealt with in a generic hearing once the necessary studies are completed.

1 2	Reference: Order No. P.U. 19 (2003), p. 111 Transcript - Perry, December 9, 2003, p. 6, lines 13-17
3	
4	It is clear from the Board's decision in the Newfoundland Power GRA, and the evidence
5	of experts at this hearing, that DSM programs need to be evaluated against system cost
6	impacts (i.e., marginal costs). There is no evidence to suggest that DSM programs for
7	Newfoundland Power should be justified against its wholesale rate. The structure of the
8	wholesale rate is not a factor in determining cost effective DSM programs.
9	
10	E.3.7 Rate and Revenue Stability
11	Rate stability for the utility and its customers is an accepted principle of rate design.
12	The Board has established mechanisms to provide rate stability and revenue stability,
13	such as Newfoundland Power's Weather Normalization Reserve and Hydro's Rate
14	Stabilization Plan. These mechanisms also benefit customers through the avoidance of
15	costly regulatory proceedings due to events beyond the control of Hydro and
16	Newfoundland Power.
17	
18 19 20	Reference: Order No. P.U. 7 (2002-2003), p. 29 Prefiled Evidence, Brockman, p. 3, lines 13 to p. 4, line 2 Prefiled Evidence, Perry and Henderson, p. 8, line 19 to p. 9, line 5
21	
22	Because the customer base of Newfoundland Power is predominantly residential,
23	Newfoundland Power recovers over 75% of its costs through energy charges. The high
24	proportion of revenue recovered through energy charges combined with the purchased
25	power cost being calculated on energy usage results in a strong relationship between

1	monthly purchased power expense and monthly sales revenue. This strong relationship
2	limits the impact on Newfoundland Power's earnings of energy sales variances from
3	forecast.
4	
5 6	Reference: Prefiled Evidence, Perry and Henderson, p. 6, lines 6-8 and p. 13, line 8 to p. 14, line 2
7	
8	Newfoundland Power is regulated based on an allowed range of rate of return on rate
9	base. Newfoundland Power's 2004 rates are currently based on a rate of return on rate
10	base of 8.91%, within an allowed range of ± 18 basis points (i.e., ± 0.18 %).
11	
12	For Newfoundland Power, energy sales forecast variances under the existing energy-
13	only rate structure can result in volatility of approximately ± 9 basis points in the rate of
14	return on rate base. There is no earnings volatility or uncertainty under the existing
15	energy-only rate structure related to Newfoundland Power's peak demand forecast.
16	Therefore, forecast variance alone will not result in Newfoundland Power going outside
17	the allowed range of rate of return on rate base. The energy-only rate is effective in
18	achieving revenue and rate stability.
19	
20	Reference: Prefiled Evidence, Perry and Henderson, p. 26, lines 6-14
21	

21

1	E.3.8 Summary on the Evaluation of the Energy-Only Wholesale Rate
2	There is no evidence that the energy-only wholesale rate has negatively impacted
3	system expansion through higher demand growth. In fact, system load factor has
4	increased since 1990.
5	
6	The energy-only wholesale rate combined with the RSP ensures Hydro will recover its
7	cost of serving Newfoundland Power.
8	
9	The energy-only wholesale rate does not affect the fairness of the costs allocated
10	between Newfoundland Power, the Industrial Customers and the Hydro Rural
11	customers.
12	
13	The energy-only wholesale rate is compatible with the efficient operation of
14	Newfoundland Power's generation facilities for the benefit of the Island Interconnected
15	System.
16	
17	The energy-only wholesale rate allows retail pricing to reflect Island Interconnected
18	System costs, thus providing an efficient pricing signal to customers.
19	
20	The proposed energy-only wholesale rate is slightly above the short-run marginal cost
21	of producing energy at Holyrood, thus promoting efficiency.
22	

22

The energy-only wholesale rate is not a factor in determining cost effective DSM
 programs.

3

4 The energy-only wholesale rate is effective in achieving revenue stability to

5 Newfoundland Power and Hydro and, in turn, rate stability to retail customers on the

- 6 Island Interconnected System.
- 7

8 E.4 Proposal to Move from the Energy-Only Rate Structure

9 E.4.1 Basis for the Proposed Sample Rate

10 Hydro's evidence regarding the implementation of a demand/energy wholesale rate is

11 found in the evidence of Mr. Greneman, and in particular the Greneman Report.

12

13 The Greneman Report does not recommend a specific demand/energy rate to

14 Newfoundland Power, but rather a demand/energy rate structure based on the rate

15 design principles set out in the Greneman Report. The Greneman Report also

16 recommends:

i) that Hydro run cases to carefully determine an appropriate demand/

18 energy balance and impacts on revenue streams;

- 19 ii) that the results of the various cases be shared with Newfoundland
 20 Power; and
- 21 iii) that the proposed demand rate be based on discussions between both22 utilities.
- 23

1	The Greneman Report provides an example of the type of rate structure that is
2	illustrative in form and in operation. The demand charge is set at the full embedded
3	demand cost determined from the 2004 cost of service study and the minimum billing
4	demand is set at 98% of the 2004 forecast peak native load of Newfoundland Power
5	less the generation credit.
6	
7	Reference: Cost of Service Evidence, Greneman, Exhibit RDG-2, Section 6.3
8	
9	The Greneman Report recommends that the appropriate demand/energy balance
10	should be further analyzed. The Greneman Report states that there are circumstances
11	where it is desirable to reflect less than the full embedded demand cost in the demand
12	rate. It also states that the demand rate should be set at levels that reasonably reflect
13	the cost of deferring new generating capacity on Hydro's system and that the energy
14	rate should reflect short-run marginal cost.
15	
16	Reference: Cost of Service Evidence, Greneman, Exhibit RDG-2, p. 11
17	
18	Hydro has not followed many of the Greneman Report's recommendations in proposing
19	a wholesale demand/energy rate. Rather, Hydro has simply adopted the Sample Rate
20	as the appropriate wholesale demand/energy rate for billing Newfoundland Power.
21	
22 23 24	Reference: NP-126 NLH NP-127 NLH NP-129 NLH

25 NP-130 NLH

1 2 3		NP-154 NLH CA-203 NLH CA-131 NLH
4		
5	The Gre	neman Report identified four key issues to be addressed in considering the
6	wholesa	le rate structure:
7	1)	Send a correct price signal to all parties (i.e., encourage DSM programs);
8	2)	Ensure that Hydro and Newfoundland Power remain revenue neutral and
9		avoid earnings (revenue) volatility;
10	3)	Provide Newfoundland Power an incentive to minimize the island peak
11		through use of its generation, rates, and other cost effective means; and
12	4)	Rationalize the rate approach with the treatment of Newfoundland Power's
13		generation in the cost of service study.
14		
15	R	eference: Cost of Service Evidence, Greneman, Exhibit RDG-2, p. 3
16		
17	The follo	owing sections review the evidence regarding Hydro's Sample Rate in relation to
18	these ke	y issues.
19		
20	E.4.2 E	valuation of the Sample Rate
21	E.4.2.1	Send a Correct Price Signal to all Parties
22	Mr. Grer	neman believes a demand/energy rate can be designed that will provide a
23	proper p	rice signal to Newfoundland Power and its customers. Hydro's Sample Rate is
24	summar	ized below:

1	Energy Charge first 420,000,000 kWh - \$0.0344/kWh
2	Energy Charge all over 420,000,000 kWh - \$0.0470/kWh
3	Demand Charge - \$7.00/kW of billing demand per month or \$84/kW per year
4	
5	The proposed billing demand is based on the weather normalized single native peak of
6	Newfoundland Power less its generation credit.
7	
8 9	Reference: Cost of Service Evidence, Greneman, Exhibit RDG-2, pp. 15-16 Cost of Service Evidence, Greneman, p. 18, lines 5-13
10	
11	The Price Signal to the End-User
12	The important price signal is the one sent to the end-user. As explained in Section
13	E.3.5.1, Newfoundland Power's rate designs reflect Island Interconnected System costs
14	and are not influenced by the form of the wholesale rate. Newfoundland Power charges
15	demand rates where reasonable to do so and attempts to reflect system short-run
16	marginal costs in its rate designs. Therefore, the rate design methodology of
17	Newfoundland Power focuses on providing proper price signals to the end-users.
18	Neither Hydro nor Mr. Greneman has reviewed the retail rates of Newfoundland Power.
19	
20	Because the wholesale rate is not an input in the rate design methodology of
21	Newfoundland Power, a revision to the wholesale rate structure will not affect
22	Newfoundland Power's rate designs. Therefore, there is no reason for moving to a
23	demand/energy wholesale rate to influence the price signal to end-users.
24	

1 2 3 4 5 6 7	Reference: Cost of Service Evidence, Greneman, p. 18, lines 5-13 Transcript - Wells, October 9, 2003, p. 46, lines 1-4 Transcript - Brockman, November 18, p. 144, line 15 to p. 145, line 4 Prefiled Evidence, Brockman, p. 19, lines 2-20 Transcript - Greneman, November 14, 2003, p. 81, lines 12-19
8	The Price Signal to Newfoundland Power – Promoting DSM
9	The Greneman Report emphasizes DSM as an important objective of the price signal to
10	be sent to all parties. The Greneman Report states:
11	
12 13 14	"The demand portion of Hydro's rate will provide Newfoundland Power a quantitative measure against which to develop a viable load management plan."
15	Reference: Cost of Service Evidence, Greneman, p. 16, lines 15-16
16	
17	However, as noted in Section E.3.6, for DSM to be cost effective, projects should be
18	evaluated against system cost impacts (i.e., marginal costs). DSM should not be
19	evaluated based on the demand portion of the wholesale rate. The demand charge in
20	Hydro's Sample Rate is based on the embedded, or historical, average system costs.
21	Historical system demand costs may be significantly different than future system
22	demand costs. Using a wholesale rate demand charge to quantitatively evaluate DSM
23	programs is inconsistent with other experts' evidence, Hydro's evidence, and with the
24	report on DSM evaluation methods provided by Mr. Brockman as Exhibit LBB-4.
25	
26	Reference: NP-167 NLH
27	

1	Hydro's approach to signalling its customers the requirement for DSM programs
2	appears to be inconsistent. Normally the largest load management opportunities are
3	with commercial and industrial customers rather than residential customers. On the one
4	hand, Hydro has no plans to implement any DSM programs with its major industrial
5	customers and has not renewed the Interruptible B contract. On the other hand,
6	Hydro's Sample Rate would send Newfoundland Power a strong signal to add
7	interruptible load.
8	
9 10 11 12 13	Reference: Cost of Service Evidence, Greneman, Exhibit RDG-2, p. 10 Transcript - Banfield, December 2, 2003, p. 81, line 21 to p. 82, line 2, and p. 101, lines 6-22 Transcript - Osler, November 13, 2003, p. 247, lines 13-22 Prefiled Evidence, Brockman, p. 14, lines 7-13
14	
15	The Price Signal to Newfoundland Power – Demand Price Signal
16	Mr. Banfield testified that the \$84 per kW demand charge reasonably reflects the cost of
17	a peaker. However, Mr. Banfield did not consider the net present value of the peaker to
18	reflect that the capacity criterion is not violated until 2011. Therefore, the peaker proxy
19	of \$84 per kW overstates the long-run marginal cost of demand. As explained in
20	Section E.2.2.2, the peaker method may not be appropriate for determining the value of
21	marginal generation demand cost on the Island Interconnected System. Further, Hydro
22	has no plans to install a peaker in 2011.
23	
24	Under the Sample Rate, Newfoundland Power would save \$84 per kW by implementing
25	demand reduction programs such as interruptible load or hot water tank controls that

1 reduce demand only during system peak hours, and are not accompanied by any 2 material reduction in energy consumption. The evidence on the system characteristics 3 (Section E.2.1) shows that such demand reduction programs would have a minimal 4 effect on Hydro's LOLH calculation and, consequently, on the timing of a capacity 5 shortfall. 6 7 In light of Hydro's position regarding the Interruptible B contract, the strong emphasis on 8 a demand charge based on the single annual peak is puzzling. The potential \$84 per 9 kW savings to Newfoundland Power that would result from expanding its interruptible 10 load program is inconsistent with Hydro not renewing the Interruptible B contract at a 11 cost of \$28.20 per kW. 12 13 Prefiled Evidence, Brockman, p. 16, line 22 to p. 17, line 9 Reference: 14 Transcript - Perry, December 9, 2003, p. 11, lines 6-24 Transcript - Banfield, December 2, 2003, p. 79, lines 16-21 15 Transcript - Haynes, November 14, 2003, p. 144, line 20 to p. 145, 16 17 line 5 18 Prefiled Supplementary Evidence, Brockman, p. 4, footnote 2 **IC-289 NLH** 19 20 21 The evidence on system characteristics (Section E.2) indicates that Newfoundland 22 Power cannot impact the current system expansion plan without reducing both energy 23 consumption and demand. 24 25 Reference: Transcript - Banfield, December 2, 2003, p. 85, line 16 to p. 87, 26 line 10 27 Production Evidence, Haynes, p. 37, Table 8

1 2 3	CA-235 NP, Appendix B of Report, NARUC Cost of Service Manual, p. 115, footnote 7 NP-154 NLH
4	
5	The Price Signal to Newfoundland Power – Energy Price Signal
6	Because of the large size of the first energy block in the Sample Rate, the price
7	Newfoundland Power would pay for energy for 8 months of the year is 3.44 $ m c/kWh$. This
8	charge is significantly below the short-run cost of production for all months of the year
9	(i.e., 5.13 ϕ /kWh). Pricing energy during the non-winter months at an amount
10	significantly below the cost of producing that energy is not efficient. The 4.70 ϕ /kWh
11	energy price that would apply to incremental purchases during the non-winter months is
12	also below the short-run marginal cost.
13	
14 15	Reference: Prefiled Evidence, Brockman, p. 15, lines 6-19 to p. 16, lines 1-20
16	
17	Hydro's Sample Rate does not meet the goal of sending a correct price signal to all
18	parties.
19	
20	E.4.2.2 The Maintenance of Revenue Stability
21	As noted in Section E.3.2, Hydro's annual revenue is guaranteed under the energy-only
22	rate and the RSP. The implementation of Hydro's Sample Rate will introduce additional
23	volatility in Hydro's earnings.
24	

1	Hydro has limited its downside risk by proposing a 98% demand ratchet in its Sample
2	Rate. Conversely, Hydro has proposed no limit on the upside revenue potential from
3	the Sample Rate. Hydro's downside risk is limited to approximately \$1.8 million while
4	the upside potential for Hydro is approximately \$5 million.
5	
6	Reference: PUB-152 NLH
7	
8	Mr. Banfield testified that revenue volatility for Newfoundland Power is a concern only
9	for Newfoundland Power to deal with. However, the revenue volatility associated with
10	the Sample Rate would also increase rate instability for Newfoundland Power's
11	customers. Hydro's retail customers will also be affected by any rate instability that
12	results from implementing a demand/energy wholesale rate.
13	
14 15 16	Reference: Transcript - Banfield, December 2, 2003, p. 93, lines 8-17 and p. 115, lines 8-24 NP-127 NLH
17	
18	As explained in Section E.3.7, Newfoundland Power is regulated based on an allowed
19	range of rate of return on rate base and its 2004 rates are set within an allowed range of
20	± 18 basis points. Hydro's Sample Rate would increase earnings volatility for
21	Newfoundland Power. The increased potential earnings volatility has two sources:
22	
23	1. increased potential for earnings volatility related to Newfoundland Power's
24	energy sales forecast variances; and

- the added potential for earnings volatility associated with the introduction of a
 demand charge.
- 3
- 4 The combined effect of the change in potential earnings volatility related to Hydro's
- 5 Sample Rate is shown in the following table.
- 6

Newfoundland Power Summary of Potential Change in Rate of Return on Rate Base (Basis Points)			
	Energy-Only Rate Increase/Decrease	Samp Increase	le Rate Decrease
Energy Forecast Variance Peak Demand Forecast Variance	±9 ±0	+30 +17	-30 -47
Total	±9	+47	-77

7

8 The increased downside potential for earnings volatility from -9 basis points to -77 basis 9 points represents a potential change in pre-tax earnings loss from \$0.9 million to \$8.3 10 million. This potential earnings volatility would have a negative effect on the rate 11 stability that customers have experienced under the energy-only wholesale rate and the 12 ability of Newfoundland Power to earn a just and reasonable rate of return on rate base. 13 14 Reference: Prefiled Evidence, Perry and Henderson, p. 1, lines 18-24 and p. 25, line 9 to p. 26, line 4 15 16

Chart 3 of U NP#2 (provided below) shows the pro-forma difference in Newfoundland
 Power's pre-tax earnings in moving from the energy-only rate to Hydro's Sample Rate
 based on the actual variances from forecast experienced during the period 1993 to
 2002.
 Chart 3 shows that, for 7 of the 10 years, the earnings of Newfoundland Power would

7 have been negatively affected. Furthermore, the negative earnings impacts are larger

8 than the positive earnings impacts primarily because of the floor proposed by Hydro in

9 conjunction with the Sample Rate to minimize Hydro's earnings risk.





10

11

12 The implementation of Hydro's Sample Rate will result in additional rate instability to

13 retail customers of Newfoundland Power and Hydro Rural retail customers.

14

1	Reference: Prefiled Evidence, Perry and Henderson, p. 27, lines 9-20		
2			
3	Mr. Greneman testified that increased volatility goes hand in hand with a		
4	demand/energy rate structure. Mr. Greneman did not view the potential earnings		
5	volatility as extreme. Mr. Greneman testified:		
6			
7 8 9 10	"it's only plus or minus \$5 million over their total earnings, and that's not a humongous number".		
11	However, Mr. Perry pointed out that \$5 million would have a very significant impact on		
12	Newfoundland Power and its customers. One option to solve the earnings volatility		
13	issue would be the implementation of a reserve mechanism to ensure Newfoundland		
14	Power recovers it purchased power costs from its customers. However, the creation of		
15	the reserve mechanism would not avoid the issue of rate instability for customers.		
16			
17	In conclusion, implementing Hydro's Sample Rate would not resolve the key issue of		
18	earnings volatility and would likely create rate instability.		
19			
20 21 22 23 24 25 26	Reference: Transcript - Greneman, November 14, 2003, p. 13, line 11 to p. 14, line 12 and p. 18, lines 2-9 Transcript - Perry and Henderson, December 9, 2003, p. 25, lines 3-12; p. 37, lines 6-8 and p. 89, lines 10-14		
20			

1 E.4.2.3 Provide Newfoundland Power an Incentive to Minimize the Island Peak 2 Through Use of Generation, Rates or Other Cost Effective Means 3 Hydro, Mr. Greneman and most other experts agreed that it was not appropriate to change the existing coordinated dispatch of Newfoundland Power's generation at 4 5 system peak. 6 7 The evidence reviewed in Section E.4.2.1 indicates that the Sample Rate: 8 1) would not affect retail rate designs that already reflect system costs; 9 2) should not be used to evaluate DSM projects and may actually send the wrong 10 signal for implementing cost effective DSM projects; and 11 3) would not send an efficient pricing signal to Newfoundland Power. 12 13 The provision of a proper signal to Newfoundland Power with respect to the operation of 14 its generation is dealt with in the following section. 15 16 E.4.2.4 Rationalize the Rate Approach with the Treatment of Newfoundland Power's Generation in the Cost of Service Study 17 18 Newfoundland Power operates its generating facilities in the best interests of the overall 19 system in accordance with Section 3(b)(i) of the *Electrical Power Control Act*, 1994 20 which states that all sources and facilities for the production, transmission and 21 distribution of power in the Province should be managed and operated in a manner that would result in the most efficient production, transmission and distribution of power. 22 23

1	Mr. Perry testified that Newfoundland Power will continue to operate its generation		
2	facilities in the most efficient manner in accordance with the Electrical Power Control		
3	Act, 1994, irrespective of the wholesale rate structure.		
4			
5	Mr. Greneman's evid	dence indicates that the wholesale rate should continue to be	
6	"generation indepen	dent" as is currently the case. Mr. Greneman, Mr. Haynes and Mr.	
7	Banfield all testified	that no change is desired in the current approach to managing the	
8	generation resource	s of Newfoundland Power.	
9			
10	The Greneman Rep	ort recommends that Newfoundland Power's billing demand be	
11	calculated as the native peak of Newfoundland Power less the generation credit		
12	(referred to as Option A). This is the appropriate approach as it does not signal the		
13	need for Newfoundland Power to operate its hydraulic generation at peak any differently		
14	than under the energy-only rate structure.		
15			
16 17 18 19 20 21 22 23 24 25	Reference:	Cost of Service Evidence, Greneman, Exhibit RDG-2, pp. 3, 4, 6, 7, 9 and 17 Transcript - Perry and Henderson, December 9, 2003, p. 90, line 8 to p. 94, line 17 Transcript - Banfield, December 2, 2003, p. 98, line 14 to p. 99, line 2 Transcript - Greneman, November 14, 2003, p. 96, line 21 to p. 97, line 12 Transcript - Haynes, October 21, 2003, p. 17, line 5 to p. 18, line 10	
26			
27	However, the Sampl	e Rate would provide an incentive for Newfoundland Power to shift	
28	water storage from r	on-winter months to winter months to reduce purchased power	

1	expense. This shift in storage would increase the likelihood of spillage, thus increasing		
2	costs to customers over the longer term. Therefore, Hydro's Sample Rate is not		
3	consistent with the objective of generation independence for the operation of		
4	Newfoundland Power's hydro plants.		
5			
6	The Board should not approve a wholesale rate that inappropriately sends a signal		
7	regarding the operation of Newfoundland Power's hydro plants. Mr. Osler testified that		
8	a rate should not be designed that invites inappropriate system operations.		
9			
10 11 12 13	Reference: Transcript - Henderson and Perry, December 9, 2003, p. 90, line 8 to p. 94, line 17 Prefiled Evidence, Perry and Henderson, p. 29, lines 3-10 Transcript - Osler, November 13, 2003, p. 266, line 13 to p. 267, line 24		
14			
15	E.4.2.5 Summary of the Evaluation of the Sample Rate		
16	The most important price signal is the one sent to the end-user. Newfoundland Power's		
17	retail rate designs are not influenced by the wholesale rate structure.		
18			
19	The proposed demand charge in the Sample Rate is too high, based on the information		
20	available on long-run marginal costs. The proposed energy charges in the Sample Rate		
21	are below short-run marginal cost, and thus would promote inefficient use of resources.		
22			
22 23	Hydro's Sample Rate would give Newfoundland Power a signal to pay \$84 per kW to		
22 23 24	Hydro's Sample Rate would give Newfoundland Power a signal to pay \$84 per kW to reduce its annual peak through the addition of interruptible load. However, Hydro is not		

1	The implementation of Hydro's Sample Rate will introduce significant volatility in the
2	earnings of Newfoundland Power and will create rate instability for retail customers on
3	the Island Interconnected System. It would also increase earnings volatility for Hydro.
4	
5	If Hydro's Sample Rate were implemented, Newfoundland Power would need to
6	implement a recovery mechanism to ensure recovery of its purchased power costs from
7	its customers.
8	
9	The Sample Rate would provide an incentive to reduce the system peak. However, the
10	emphasis on demand charges based on a single peak may not be a correct price signal,
11	and could lead to inappropriate decisions in the implementation of DSM programs. The
12	wholesale rate is not a factor in determining cost effective DSM programs.
13	
14	Hydro's Sample Rate does meet the objective of generation independence for the
15	thermal generation of Newfoundland Power. However, it sends an inappropriate signal
16	regarding the operation of Newfoundland Power's hydro plants.
17	
18	In conclusion, Newfoundland Power submits that Hydro's Sample Rate does not
19	promote efficiency, creates unnecessary revenue volatility and rate instability,
20	and should not be implemented.
21	
22	

1 E.5 EES Wholesale Demand/Energy Rate Design

2 EES Consultants suggested a demand/energy wholesale rate option during crossexamination, testifying that Hydro's proposal for an \$84 per kW demand charge based 3 4 on peak demand was too high. They proposed a demand charge of \$51 per kW per 5 year. The energy charge proposed was 4.34¢ per kWh for all kWh. 6 7 Transcript - Chymko, November 19, 2003, p. 39, line 12 to Reference: p. 42, line 8 8 9 p. 85, line 16 to p. 86, line 22 10 p. 93, line 9 to p. 97, line 16 p. 89, line 22 to p. 90, line 3 11 12 13 Mr. Perry testified that the rate proposed by Mr. Chymko would result in substantial 14 earnings volatility. The proposed energy charge of 4.34 ϕ /kWh is approximately 15% below the current estimate of system short-run marginal cost (5.13 ¢/kWh). Ms. Tabone 15 16 agreed that energy should not ordinarily be sold below the short-run marginal cost of 17 production. If the energy charge was set to equal the short-run marginal cost of energy 18 at 5.13 ¢/kWh, the demand price would be approximately \$1 per kW per month (\$12 per 19 KW per year). 20 21 Transcript - Chymko, November 19, 2003, p. 99, lines 2-10 and Reference: 22 p. 100, lines 23 to p. 102, line 15 Transcript - Perry, December 9, 2003, p. 143, line 18 to p. 144, 23 24 line 1 25 Transcript - Tabone, November 19, p. 98, lines 19-25 26 27

The demand/energy wholesale rate suggested by EES Consultants does not address
 the key rate design issues of sending a proper price signal and minimizing revenue
 volatility.

4

5 E.6 Implementation Issues with a Demand/Energy Wholesale Rate

6 The introduction of a demand/energy wholesale rate structure for Newfoundland Power

7 would require resolution of the following implementation issues:

- 8 1) Design of a reasonable demand/energy rate based upon the characteristics of
- 9 the Island Interconnected System;
- 10 2) Development of a weather normalization methodology for demand;
- 11 3) Month of implementation to ensure calendar year revenue neutrality while 12 moving from the energy-only rate to a demand/energy rate;
- 13 4) Creation of a reserve to ensure Newfoundland Power is permitted to recover
- 14 its annual purchased power expense and earn a just and reasonable rate of
- 15 return on rate base; and
- 16 5) Resolution of some minor metering issues.
- 17
- 18 E.6.1 Demand/Energy Rate Design
- 19 Any attempt to implement a demand/energy rate without a marginal cost study would
- 20 require the Board to guess at the appropriate demand/energy balance. A marginal cost
- 21 study is required to ensure that any demand/energy wholesale rate will promote
- 22 efficiency.
- 23

1	Reference: Transcript - Brockman November 18, 2003, p. 10, line 25		
2	to p. 14, line 22		
3			
4	At Hydro's 2001 Rate Hearing, Mr. D. Bowman, the Consumer Advocate's expert		
5	testified he would need to see marginal costs before recommending a demand rate to		
6	the Board. In this proceeding, Mr. D. Bowman testified he would still like to see what		
7	the marginal costs are when designing a rate.		
8			
9	Mr. Chymko testified that an integrated resource plan and marginal cost study should be		
10	undertaken very quickly. Without that information, the Board does not know the		
11	appropriate price balance for demand and energy in evaluating DSM and rate design.		
12			
13	Newfoundland Power submits that, if a demand/energy wholesale rate is to be		
14	implemented, long-run marginal cost information is required to design an		
15	efficient demand/energy wholesale rate.		
16			
17 18 19	Reference: Transcript - C. D. Bowman, November 17, 2003, p. 94, line 1 to p. 95, line 4 Transcript – Chymko, November 19, p.96, line 7 to p.97, line 17		
20			
21	E.6.2 Weather Normalization of Demand		
22	The Greneman Report recognizes that one of the concerns about implementing a		
23	demand/energy rate is the potential volatility in earnings due to weather variations. The		
24	Greneman Report recommends that the rate design should recognize only the relevant		

variables in determining the billing demand by normalizing for the effects of weather.

1	Hydro currently uses a weather adjustment model that estimates the weather-related	
2	portion of system peak. The Greneman Report has presented options for a weather	
3	normalization methodology for demand in Appendix 1.	
4		
5 6	Reference: Cost of Service Evidence, Greneman, Exhibit RDG-2, p. 5, 12 and pages 18-19	
7 8	Based on the results of the weather normalization method currently available, the	
9	potential financial impact of demand forecast variances on Newfoundland Power and its	
10	customers is severe. Therefore, the current weather normalization methodology does	
11	not sufficiently address the potential for earnings volatility under the proposed Sample	
12	Rate.	
13		
14	Newfoundland Power submits that, if a demand/energy wholesale rate is to be	
15	implemented, the use of weather normalized billing demand is required.	
16	However, Newfoundland Power believes that an improved methodology is	
17	required.	
18		
19 20 21	Reference: Transcript - Perry, December 9, 2003, p. 35, line 17 to p. 37, line 8 PUB-151 NLH PUB-152 NLH	
22		
23	E.6.3 Revenue Neutrality	
24	If the implementation of a demand/energy rate were to occur other than on January 1 st	
25	the amount of revenue collected for the remainder of the year could differ significantly	

1	from the revenue that would be collected under the energy-only wholesale rate. For
2	example, if the Sample Rate were implemented on April 1 st 2004, Hydro would collect
3	approximately \$5 million more (solely as a result of timing) during the remainder of 2004
4	than if the energy-only wholesale rate remained in effect. The amount would vary
5	significantly depending on the month of implementation.
6	
7	Reference: Transcript - Perry, December 9, 2003, p. 13, lines 4-16
8	
9	Newfoundland Power submits that, if a demand/energy wholesale rate is to be
10	implemented, the Board should ensure that revenue neutrality is maintained
11	during the calendar year of implementation. This can best be achieved by
12	implementing the change on January 1 st of that year.
13	
14	E.6.4 Reserve Mechanism
15	Section 80(2) of the Public Utilities Act entitles Newfoundland Power to recover its
16	purchased power expense from its customers.
17	
18	The potential earnings losses illustrated in Section E.4.2.2 as a result of implementing
19	Hydro's Sample Rate would not be recovered in Newfoundland Power's customer rates
20	unless the customer rates are modified.
21	
22	In Canada, there is a propensity to have rate adjustment mechanisms among investor-

23 owned distribution utilities to deal with purchased power cost volatility. The response to

1	CA-238 NP provides a description of the mechanisms in place for Aquila Networks BC,		
2	EPCOR and ENMAX in Alberta, Ontario Utilities, and Maritime Electric.		
3			
4	Reference: Prefiled Evidence, Brockman, p. 21, lines 6-8		
5			
6	The earnings volatility of Newfoundland Power under the energy-only wholesale rate		
7	already has potential to consume approximately half of the range of rate of return on		
8	rate base. Mr. Perry explained that even if the wholesale rate were modified to include		
9	a demand charge of \$1 per kW per month with an energy charge of 5.13¢ per kWh, the		
10	potential earnings volatility would consume the entire range of rate of return on rate		
11	base. The potential earnings volatility with Hydro's Sample Rate would consume more		
12	than four times the range or nine times the current level of potential earnings volatility		
13	under the energy-only wholesale rate.		
14			
15	Reference: Transcript - Perry, December 9, 2003, p. 6, line 19 to p. 8, line 11		
16			
17	Mr. Perry explained that a reserve mechanism would be required for Newfoundland		
18	Power to deal with the increased earnings volatility that would result if a demand/energy		
19	rate were implemented. The reserve mechanism could provide for a July 1 st adjustment		
20	to customer rates.		
21			
22 23 24 25	Reference: Transcript - Perry, December 9, 2003, p. 35, line 17 to p. 37, line 8 and p. 154, line 7 to p. 155, line 2		

1 Newfoundland Power submits that, if a demand/energy wholesale rate is to be

- 2 implemented, a reserve should be established to deal with variances in
- 3 purchased power expense. The reserve should be implemented in concert with
- 4 the change in the wholesale rate structure.

1 E.7 Conclusion

- A review of the evidence on the wholesale rate options presented to the Board
 leads to the following conclusions:
- 4 1) Retail rate designs should not be based on the wholesale rate but on
 5 system costs;
- DSM evaluations should not be based on the wholesale rate but on the
 impacts on future system costs;
- 8 **3)** The cost effectiveness of rate options to customers can only be
- 9 determined based on their effects on future system costs;
- 10 4) The current energy-only wholesale rate is compatible with efficient
 11 operation of generation on the system;
- 12 5) The movement to a demand/energy wholesale rate would result in
 13 increased earnings volatility for the utilities;
- 14 6) The movement to a demand/energy wholesale rate would result in
- 15 reduced rate stability for customers; and
- 16 7) The movement to a demand/energy wholesale rate would provide no
 17 benefits to customers.
- 18
- 19 A long-run marginal cost and retail rate design study is required to permit
- 20 implementation of cost effective DSM and to evaluate the efficiency of retail rate
- 21 designs. Newfoundland Power would review the results of the study to determine
- 22 what action, if any, is required in the areas of rate design and DSM.
- 23

Newfoundland Power is currently undertaking a load research program that will provide usage pattern information to be used in evaluating the fairness of its retail rate designs. Newfoundland Power currently uses the short-run marginal costs as an input in rate design. Information from a long-run marginal cost study and a retail rate design study will provide further information to evaluate the efficiency of retail rate designs.

7

8 Improvements in system efficiency can only be achieved if proper signals are 9 sent to the end users. The structure of the wholesale rate to Newfoundland 10 Power does not affect these signals and does not need to be changed.

11

12 The current energy-only wholesale rate structure to Newfoundland Power should13 be maintained.

1 F. RURAL DEFICIT

2 F.1 Managing the Rural Deficit

3 F.1.1 General

4 Hydro owns and operates 24 diesel generating plants serving 4,400 customers 5 on isolated systems. Hydro also serves 21,800 rural customers on the Island 6 Interconnected System. The rural deficit is the difference between the cost of 7 providing service to those rural customers and the revenues collected from those 8 customers. Until 1989, the rural deficit was funded by Government. The cost is 9 currently borne by customers of Newfoundland Power and by the customers 10 served by Hydro's Labrador Interconnected System. In 1999, the Industrial 11 Customers of Hydro were relieved by legislation of the responsibility for sharing 12 in the rural deficit.

13

The forecast rural deficit for the 2004 test year is \$41.1 million. Approximately \$36.4 million is proposed to be included in the 2004 revenue requirement from Newfoundland Power and \$4.7 million is proposed to be included in the 2004 revenue requirement from Rural Labrador Interconnected. The rural deficit increases the revenue requirement from Newfoundland Power by 17% and increases the rates paid by the customers of Newfoundland Power by approximately 10%.

F-1

1 2 3 4 5	Reference:	Corporate Overview Evidence, Wells, Schedule II, Rural Deficit Issue, pp. 1-2 of 14 Cost of Service Evidence, Greneman, Exhibit RDG-1 Rev. 2, p. 3 of 107 Transcript - Wells, October 7, 2003, p. 123, lines 1-7	
6			
7	In Order No. P.U. 7	(2002 – 2003), the Board acknowledged the burden that the	
8	rural deficit places of	on subsidizing ratepayers and expressed concern with the	
9	potential for increas	sing levels of subsidization.	
10			
11	Reference:	Order No. P.U. 7 (2002 – 2003), p. 126	
12			
13	F.1.2 Minimizing	the Rural Deficit	
14	Hydro has implemented a number of cost reduction initiatives to reduce the rural		
15	deficit. The initiatives identified by Hydro include: interconnection of a number of		
16	diesel areas to the main grid; a reduction in the number of operating and support		
17	personnel; the implementation of reliability-centered maintenance practices; and		
18	savings achieved th	nrough conservation initiatives in high cost diesel areas.	
19			
20	While Government	policy for rural rates and the cost of service assignment of	
21	assets are generally outside of Hydro's control, Hydro can influence the level of		
22	the rural deficit by being as efficient and innovative as possible in its operations.		
23			
24 25 26 27	Reference:	Corporate Overview Evidence, Wells, 1 st Revision, p. 25, line 30 to p. 26, line 17 Transcript - Martin, October 24, 2003, p. 96, line 23 to p. 98, line 7	

F-2

1	In spite of Hydro's initiatives to date, the rural deficit is forecast to continue to		
2	increase. For example, the projected rural deficit for 2007 is \$44 million.		
3			
4	Reference: NP-56 NLH		
5			
6	F.1.3 Contributors to Rural Deficit Growth		
7	The rural deficit allocated to the L'Anse au Loup system has increased by		
8	approximately \$200,000 from 1999 to 2004.		
9			
10 11 12	Reference: Transcript - Wells, October 7, 2003, p. 144, line 21 to p. 145, line 18		
13	Hydro's generation reliability criterion for isolated systems requires Hydro to		
14	maintain firm generation capacity to meet the system peak load. Firm generation		
15	capacity is defined as the total installed capacity on the system minus the largest		
16	single unit.		
17			
18	Reference: NP-41 NLH		
19			
20	As a result of the demand growth on the L'Anse au Loup system that resulted		
21	from shifting from diesel rates to Newfoundland Power rates, Hydro is		
22	considering an increase in diesel capacity in L'Anse au Loup for reliability		
23	purposes in 2005. The cost of a 500 kW diesel generator is approximately		
24	\$500,000.		

F-3

1 2	Reference:	CA-14 NLH, p. 4 Transcript - Martin, October 27, 2003, p. 54, lines 4-9
3		
4	In Charlottetown ar	nd Little Bay Islands, Hydro recently installed additional
5	generating equipme	ent as a result of the addition of a major general service
6	customer in each lo	ocation.
7		
8 9 10 11 12	Reference:	NP-50 NLH NP-209 NLH Transcript - Martin, October 27, 2003, p. 64, line 10 to p. 65, line 6
13	Recovery of depreciation and finance costs associated with the capital addition in	
14	Charlottetown impacts the rural deficit by approximately \$170,000 annually.	
15		
16	Reference:	NP-51 NLH
17		
18	Twice in the mid 19	990's, Hydro reported that a new policy to recover the capital
19	cost of installing generation equipment at the request of a major new general	
20	service customer would be implemented. This policy has not been implemented.	
21	If it had, the impact of the generation additions at Charlottetown and Little Bay	
22	Islands would have	been lessened.
23		
24 25 26	Reference:	NP-52 NLH, p.5.14 NP-53 NLH, p.32 NP-209 NLH

1 F.1.4 Monitoring the Rural Deficit

2	The Board's Financial Consultant is of the view that provision to the Board of
3	information on the impact of proposed capital projects on the rural deficit, when
4	significant, would be useful. The Board's Financial Consultant is also of the view
5	that an annual report to inform the Board of factors affecting changes in the level
6	of the rural deficit would be useful.
7	
8 9	Reference: Transcript - Brushett, December 11, 2003, p. 138, line 13 to p. 140, line 17
10	
11	Newfoundland Power submits that Hydro should report annually to the
12	Board on the components of the rural deficit. The report should provide an
13	analysis of factors contributing to significant changes in the rural deficit
14	and a 5-year forecast of the rural deficit.

1 G. CONCLUSION

2	Newfoundland Power submits that the Board should decide the various issues arising
3	out of Hydro's General Rate Application in accordance with the submissions contained
4	in this Brief of Argument.
5	
6	Newfoundland Power also submits that the Board should make its determination on the
7	issues upon which the parties have agreed in accordance with the proposed resolution
8	in the Mediation Report on Cost of Service and Rate Design Issues dated October 3,
9	2003, filed as Consent #1.
10	
11	
12	
13	
14	
15	RESPECTFULLY SUBMITTED
16 17 18	lan Kelly, Q.C. and Brock Myles Counsel to Newfoundland Power Inc. 55 Kenmount Road
19	SL JUHIS, NL ATB 340