- 1 Q. What are the 2001 rates charged for demand and energy to Labrador
- 2 Industrial Customers and what will those rates be in 2002?

4 A. Please see response to NP-142(a).

- 1 Q. Provide copies of the existing and any proposed contracts between Hydro
- 2 and its Labrador Industrial Customers?

4 A. Please see the response to NP-142(a).

- 1 Q. What is the percentage increase in the rates proposed by Hydro for its
- 2 Labrador Industrial Customers?

4 A. Please see the response to NP-142(a).

Q. Provide the investments analysts' forecasts compiled by I/B/E/S International as referenced at p. 33-34 of the evidence of K.C. McShane.
 A. Please find attached the most recent I/B/E/S reports for Canada used in the testimony (October, November, and December 2000) from the "Canadian Summary Data" reports; the "All Companies" growth rate (marked with an

asterisk) was used as the earnings forecast for the TSE 300. The fourth

8 quarter 2000 5-year growth forecast was computed by averaging the growth

forecast of the three months provided.

10

9

7

The corresponding U.S. S&P 500 growth rates are taken directly from I/B/E/S

12 electronic database, which provides a single summary value monthly.

Q. 1 Who are the members of the "investment community" referred to at lines 2 26-27 of p. 52 of the evidence of K.C. McShane? Which of them have the 3 views attributed to that community by Ms. McShane and where have such 4 views been expressed? If such views have been expressed in writing or have 5 been recorded, please provide copies or audio tapes. 6 7 A. The Dominion Bond Rating Service stated in its May 2000 report on 8 HydroOne, "future earnings will be tied to interest rates via the approved 9 return on equity. Set at 9.35% for 1999 and 9.88% for 2000, the approved 10 ROE is somewhat low compared to other alternative investments, but 11 comparable to other Canadian utilities." 12 13 RBC Dominion Securities' "ROE Outlook for 2001" (October 31, 2000) 14 stated, "In light of the low levels of allowed ROEs calculated by the various 15 formulas, and the changing nature of the risk associated with the operations 16 of these companies, a number of utility and pipeline companies are pursuing 17 modifications to their ROE formulas and/or incentive regulation. Both 18 endeavors are motivated by the objective of allowing the companies to earn 19 higher ROEs that more appropriately compensate for the risk associated with 20 their operations." 21 22 The returns that have recently resulted from the NEB formula – which are 23 similar to those allowed in other Canadian jurisdictions -- have been 24 described as "anti-competitive returns that don't really work in this high flying 25 race for capital that we have here" (Donald J. Eassey, First Vice President, 26 Merrill Lynch, cited in "Roundtable Forum: Natural Gas Transmission and 27 Distribution", The Wall Street Transcript, February 21, 2000). Ronald J.

Barone, Managing Director of PaineWebber Inc., stated in the same forum,

28

2001 General Rate Application Page 2 of 2

"The regulatory environment is totally unrealistic as far as authorized returns
are concerned. I believe the regulators lose sight of the fact that there is only
one capital market. With the S&P 500 earning ROEs of 20% or more, why
should an investor accept a return on equity of 9%? To me, it just seems
unrealistic."

1	Q.	Please provide copies of any and all directives applicable to Hydro given to
2		the Board pursuant to Section 5.1 of the <u>Electrical Power Control Act, 1994.</u>

4 Hydro is not aware of any directives applicable to Hydro pursuant to Section A. 5 5.1 of the Electrical Power Control Act, 1994.

Q. Provide all of the CBRS and S&P quantitative guidelines for different 1 2 categories of Canadian utilities for different debt rating categories as referred 3 to in the evidence of K. S. McShane at p. 17-18 and copies of all materials describing what categories of utility fall under which guidelines. 4 5 6 Please see the attached: Α. 7 8 1. Standard & Poor's *Utilities & Perspectives* (June 21, 1999) 9 Standard & Poor's *Infrastructure Finance* (October 1998) 10 2. 11 3. 12 CBRS Methodology of Rating Debt Securities of Regulated Utilities 13 (Summer 1994).

1 Q. Provide a copy of the CBRS report on NB Power as referred to at lines 3-9 of p. 22 of the evidence of K.C. McShane.

3 4

5 A. Please find attached the referenced CBRS report on the Province of New

6 Brunswick.

Q. Provide a copy of the DBRS report The Canadian Electric Utility Industry
 referred to at lines 17-18 of p. 22 of the evidence of K.C. McShane.

3

4 A. Please see the attached copy of the DBRS report "The Canadian Electric Utility Industry" (October 2000).

1	Q.	Provide detailed calculations showing the derivation of the Group Average
2		and Canadian Industry Average numbers shown on Schedule I of the
3		evidence of K. C. McShane.

6

7

A. Schedule I was taken directly from the DBRS report "The Canadian Electric Utility Industry" (October 2000) (see response to IC-53). The averages were calculated by DBRS.

Q. 1 Explain the role, if any, that the generating facilities owned by Abitibi 2 Consolidated and Corner Brook Pulp and Paper play in voltage and 3 frequency support to the island grid. 4 5 Α. The generating facilities owned by Abitibi Consolidated and Corner Brook 6 Pulp and Paper can be grouped into two categories: 50 Hz generation and 7 60 Hz generation. The 50 Hz generation of each customer provides voltage 8 and frequency support to the individual 50 Hz systems owned by each 9 customer, which is of no benefit to the Island Interconnected System. 10 11 The 60 Hz generation of Abitibi Consolidated in Grand Falls is connected to

1516

17

18

19

20

21

22

23

24

25

26

27

12

13

14

The 60 Hz generation of Corner Brook Pulp and Paper at Deer Lake provides voltage support to the 66 kV transmission system owned and operated by the customer. The typical VAR dispatch at Deer Lake is set to ensure an adequate stability margin for the plant and acceptable voltage levels of the customer's 66 kV system. Thus the typical mode of operation provides no appreciable voltage support to the Island Interconnected System. The VAR output of the Deer Lake plant can be changed to adjust the voltage level on Hydro's 66 kV bus at its Deer Lake Terminal Station. However, this is one of a number of alternatives available to Hydro to control the Island Interconnected System voltages in the Deer Lake area. Alternatives include adjustment of the T1 and T2 transformer tap positions at Deer Lake,

the low voltage (6.9 kV) system at the mill and provides voltage support for

230 kV transmission system for adjustments in VAR dispatch of Abitibi

Consolidated owned generation.

mill operation. There is very little impact on voltage levels of the surrounding

2001 General Rate Application Page 2 of 2

1	adjustment of the VAR output at Hinds Lake and adjustment of the VAR
2	output at Cat Arm.
3	
4	The generation facilities owned by Abitibi Consolidated and Corner Brook
5	Pulp and Paper do not play a role in frequency control of the Island
6	Interconnected System. Plant outputs are not under the control of Hydro's
7	Energy Control Centre, but rather are dependent upon mill production and
8	water availability.

1	Q.	Have any shares been issued out of Newfoundland and Labrador Hydro? If
2		so, indicate to whom such shares have been issued and provide copies of
3		the share certificates.
4		
5	A.	Newfoundland and Labrador Hydro has issued 22, 503, 942 shares, all of
6		which have been issued to the Department of Finance, Government of
7		Newfoundland. The issuance of these shares is encompassed in three
8		Share Certificates as follows:
9		Share Certificate #001 dated July 2 nd , 1975 – 22,000,000 shares
10		Share Certificate #002 dated July 2 nd , 1975 – 500,000 shares
11		Share Certificate #003 dated July 2 nd , 1975 – 3,942 shares
12		Copies of the above noted Share Certificates have been attached.

ı	Q.	Describe in detail the linancial and/or operational or other business risks to
2		which Hydro is subject which a fully informed investor would consider in
3		determining the risk premium to be demanded for an investment in Hydro.
4		
5		
6	A.	An informed investor would look at the following aspects of Hydro's business
7		and financial risk:
8		
9		Market Profile
10		
11		Industrial diversity of economy
12		Outlook for growth in service area
13		 Degree to which revenues are concentrated among a small number of
14		customers
15		Competition with alternative energy sources
16		Bypass opportunities/cost structure
17		
18		Operational/Supply Profile
19		
20		Climate/geography
21		Extent to which system is interconnected/isolated
22		 Sources of generation (nuclear vs. thermal vs. hydro)
23		 Operational risks related to generation (e.g., water levels)
24		Diversity of fuel supply sources
25		Reserve capacity
26		Transmission constraints

1	Regulatory Environment
2	
3	 Type of test year (historic vs. future)
4	 Regulatory protection (e.g., deferral accounts) from forecasting risks,
5	e.g., load variations (weather/economy related), fuel costs/generation
6	mix, interest rates.
7	 Regulatory precedent regarding recovery of invested capital (used and
8	useful vs. prudently incurred; stranded costs)
9	Level of returns allowed
10	State of industry restructuring
11	
12	Financial Risks
13	
14	Capital structure ratios
15	Use of short-term debt
16	Existence of debt guarantee
17	 Level of capital expenditures/need to access capital markets
18	Interest coverage
19	Level of free cash flows

- 1 Q. Is it Ms. McShane's view that Government should get the same return on investments in roads, schools, hospitals and economic development projects as it gets on its investment in Hydro?
- The Province's equity investments are limited to Hydro and Newfoundland Liquor Corporation. Ms. McShane has made no specific analysis of the issues involved in determining whether it is appropriate to operate the various functions cited in the question as revenue-producing corporate

9

(commercial) entities.

Q. Provide the percentage of each of Canadian and American residents who
 invest in the stock market as of each of the following years: 1950, 1960,
 1970, 1980, 1990, 2000.

Α.

Ms. McShane does not have a database that includes the values requested. However, in May 2000, *The Globe and Mail* reported the results of a national survey sponsored by the Toronto Stock Exchange. This study indicated that 49% of Canadian adults own stocks either directly or in mutual funds. The article also reported that the last time the TSE did such a study, in 1996, 37% held stocks or mutual funds while in 1983, the figure was just 13%. A copy of the article is attached.

The New York Stock Exchange's *Shareownership 2000* uses data from the 1998 *Survey of Consumer Finances*, a household survey conducted by the Federal Reserve Board. The NYSE study identified 84 million shareholders in 1998, both direct and indirect, representing 43.6% of the country's adult population. This figure is up 21% from 1995's 69.3 million and up 61% from 1989's 52.3 million. A summary of this report, obtained from the NYSE web site, is attached.

Q. Provide copies of the prospectus or offering memorandum in respect of the
 last debt issue by each of Hydro and the Province of Newfoundland.

3

4

5

6

7

8

9

A. Hydro is considered a government entity under the various securities laws, and hence is exempt from the requirement for a prospectus or offering memorandum. We do however publish an offering circular, a copy of which is attached in respect to the most recent Series AB debenture, as well as a copy of that associated with the Province of Newfoundland's most recent issue.

Page 1 of 3

1 Q. Provide a Schedule in the form of Schedule I to the evidence of H.G. Budgell showing each of the years from 1992 to 2002.

3

5 A. See attached.

- Q. Provide the short and long term forecasts filed with the Board in each of the
 rate referrals made by Hydro since 1977 together with actual loads
 experienced in each of the years covered by such forecasts to date.
- 5 A. See attached.

	PUB Referral	Sep-77	Jul-79	Apr-81	Mar-83	Aug-85	Mar-89	Feb-90	Nov-91
	1 0D Hololida	Сор / /	00.70	7,0101	Widi Go	7 tag 00	Widi 66	1 02 00	1107 01
		Short Term L	oad Forecast	for NLH Net	Supply As Pre	esented At Hy	dro Rate Refe	rrals to the PU	JB (GWh)
	ACTUALS								
1977	3,402	3,417							
1978	3,703	3,766							
1979	3,649		3,735						
1980	3,847		4,218						
1981	3,923			4,195					
1982	4,475			4,852					
1983	4,715				4,604				
1984	4,942				4,914				
1985	5,209					5,225			
1986	5,214					5,382			
1987	5,380								
1988	5,603								
1989	5,817						5,809		
1990	5,650						5,906	5,723	
1991	5,754							5,942	5,881
1992	5,929							6,163	6,056
1993	6,000								
1994	5,818								
1995	5,927								
1996	5,989								
1997	6,164								
1998	5,718								
1999	5,877								
2000	6,141								

IC-80 2001 General Rate Application Page 3 of 3

	PUB Referral	Sep-77	Jul-79	Apr-81	Mar-83	Aug-85	Mar-89	Feb-90	Nov-91				
	T OD Referral	Оер-11	Jui-13	Αρι-01	IVIAI-03	Aug-05	Iviai-05	1 65-30	1404-31				
	Long Term Load Forecast for Total Island Load As Presented At Hydro Rate Referrals to the PUB (GWh)												
	ACTUALS						, 6.1.6 116.1.6		02 (01111)				
1977	4,897	5,206											
1978	5,310	5,699											
1979	5,196	6,018	5,475										
1980	5,491	6,237	5,981										
1981	5,648	6,506	6,720	6,396									
1982	5,962	6,720	7,072	6,764									
1983	6,188		7,208	7,059	Not In								
1984	6,629			7,391	Evidence								
1985	6,597			7,745		6,747							
1986	6,656			8,046		7,059							
1987	6,769			8,822		7,409							
1988	7,216					7,701							
1989	7,380					7,853	7,561						
1990	7,258					7,962	7,539	7,384					
1991	7,464					8,137	7,764	7,693	7,547				
1992	7,575					8,425	7,894	7,883	7,812				
1993	7,730						7,958	8,054	8,013				
1994	7,705						8,010	8,232	8,162				
1995	7,724						8,153	8,331	8,331				
1996	7,671						8,190	8,549	8,427				
1997	7,983						8,378	8,692	8,611				
1998	7,310						8,573	8,824	8,731				
1999	7,728							8,992	8,907				
2000	8,057								9,065				

Q. Provide the economic forecasts prepared by the Provincial Government and
 used in creating the Long Term Planning Load Forecast as referred to at p.
 6-7 of the evidence of H.G. Budgell.

4

5 A. See attached summary of Key Economic Indicators. This economic forecast
6 was prepared by the Provincial Government (Department of Finance) for
7 Hydro's own planning purposes and, at Hydro's direction, incorporates
8 assumptions that may or may not agree with the Province's own views.

												Page	2 of 2
GDP at Market Prices (\$ Millions) % Change	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
	10,871	11,638	13,344	14,122	14,712	14,975	15,503	16,290	17,097	17,735	18,046	18,228	18,566
	6.3	7.1	14.7	5.8	4.2	1.8	3.5	5.1	5.0	3.7	1.8	1.0	1.9
Real GDP at Market Prices (\$1992 Millions)	10,491	11,051	11,568	12,186	12,741	13,022	13,283	13,661	13,934	14,160	14,195	14,146	14,208
% Change	6.2	5.3	4.7	5.3	4.6	2.2	2.0	2.8	2.0	1.6	0.2	-0.3	0.4
Adjusted Real GDP at Market Prices (\$1992 Millions) % Change	10,222	10,620	10,979	11,285	11,393	11,552	11,728	11,802	11,885	12,055	12,253	12,434	12,656
	3.6	3.9	3.4	2.8	1.0	1.4	1.5	0.6	0.7	1.4	1.6	1.5	1.8
GDP Deflator (1992 = 100)	103.6	105.3	115.4	115.9	115.5	115.0	116.7	119.2	122.7	125.2	127.1	128.9	130.7
% Change	0.0	1.6	9.5	0.5	-0.4	-0.4	1.5	2.2	2.9	2.1	1.5	1.4	1.4
Consumer Price Index (1992=100)	108.4	110.0	113.1	114.8	116.8	118.9	121.1	123.3	125.6	127.9	130.3	132.7	135.0
% Change	0.2	1.5	2.8	1.6	1.7	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8
Personal Income (\$ Millions) % Change % Change, real	10,054	10,490	10,849	11,392	11,803	12,340	12,774	13,139	13,513	13,970	14,473	14,977	15,544
	1.5	4.3	3.4	5.0	3.6	4.6	3.5	2.9	2.8	3.4	3.6	3.5	3.8
	1.3	2.8	0.6	3.4	1.8	2.7	1.7	1.0	1.0	1.5	1.7	1.7	1.9
Disposable Income (\$ Millions) % Change % Change, real	7,872	8,230	8,600	9,034	9,350	9,748	10,099	10,379	10,660	11,007	11,390	11,770	12,198
	0.4	4.6	4.5	5.1	3.5	4.3	3.6	2.8	2.7	3.3	3.5	3.3	3.6
	0.2	3.1	1.7	3.4	1.7	2.4	1.8	0.9	0.8	1.3	1.6	1.5	1.8
Retail Sales (\$ Millions) % Change % Change, real	3,939	4,223	4,435	4,655	4,740	4,897	5,018	5,100	5,196	5,337	5,511	5,679	5,861
	3.7	7.2	5.0	5.0	1.8	3.3	2.5	1.6	1.9	2.7	3.3	3.0	3.2
	4.7	5.9	1.9	3.3	0.1	1.3	0.5	0.0	0.2	0.9	1.5	1.4	1.5
Housing Starts % Change	1,450	1,371	1,488	1,607	1,586	1,672	1,699	1,691	1,733	1,787	1,870	1,877	1,895
	-14.5	-5.4	8.6	7.9	-1.3	5.4	1.6	-0.5	2.5	3.1	4.7	0.4	0.9
Employment ('000s)	194.2	204.9	204.9	210.0	211.9	215.3	217.1	216.9	216.8	217.7	219.0	220.0	221.5
% Change	2.6	5.5	0.0	2.5	0.9	1.6	0.8	-0.1	0.0	0.4	0.6	0.5	0.7
Labour Force ('000s)	237.0	246.7	243.9	247.3	249.5	250.6	251.8	252.2	252.4	252.6	252.8	252.7	252.6
% Change	1.9	4.1	-1.1	1.4	0.9	0.5	0.5	0.1	0.1	0.1	0.1	0.0	0.0
Unemployment Rate (%) Population ('000s) % Change	18.0	16.9	16.0	15.1	15.0	14.1	13.8	14.0	14.1	13.8	13.4	12.9	12.3
	545.4	540.8	538.8	539.3	539.8	540.4	541.5	541.4	541.4	540.7	540.0	539.2	538.7
	-1.6	-0.8	-0.4	0.1	0.1	0.1	0.2	0.0	0.0	-0.1	-0.1	-0.1	-0.1
Capital Investment, (PPI definition) % Change % Change Real	2,774	3,338	3,230	3,240	3,428	3,742	3,740	3,136	2,931	3,015	3,119	3,262	3,394
	1.3	20.3	-3.2	0.3	5.8	9.2	0.0	-16.1	-6.5	2.9	3.4	4.6	4.0
	1.0	20.1	-0.3	1.5	3.7	7.4	-0.4	-13.6	-4.5	2.3	2.9	3.8	3.3
Labour Income (\$ Millions)	5,744	6,078	6,402	6,746	6,954	7,284	7,556	7,760	7,967	8,241	8,540	8,829	9,167
% Change	2.6	5.8	5.3	5.4	3.1	4.7	3.7	2.7	2.7	3.4	3.6	3.4	3.8

Note: Adjusted GDP excludes income that will be earned by the non-resident owners of Newfoundland mega-projects to better reflect growth in economic activity that generates income for residents. It differs from actual GDP only from 1997 forward.

Source: Economic & Statistics Branch (Economic Research & Analysis), Department of Finance Last updated: October 18, 2000 1 Q. Identify the voltage support equipment referred to at line 6 of page 17 of the evidence of H. G. Budgell.

3

4 A. The voltage support equipment referred to at line 6 of page 17 of the
5 evidence of H. G. Budgell includes shunt capacitor banks, shunt reactors and
6 synchronous condensers.

1	Q.	For each year since the in-service date, provide the annual production for										
2		each of the h	each of the hydraulic generating stations plus the total. Use the following									
3		format:										
4												
5	<u>YEAR</u>	BAY	UPPER	HINDS	CAT	PARADISE	OTHER	<u>TOTAL</u>				
6		<u>D'ESPOIR</u>	<u>SALMON</u>	<u>LAKE</u>	<u>ARM</u>	RIVER	<u>HYDRAULIC</u>					
7												
8												
9												
10	A.	Please refer	to the attache	ed table	S.							

Newfoundland & Labrador Hydro Net Generation (GWh)

. ,				PARADISE	OTHER	<u>TOTAL</u>
BAY D'ESPOIR	UPPER SALMON	HINDS LAKE	CAT ARM	RIVER	HYDRAULIC	
1,302.2						1,302.2
1,281.9						1,281.9
•						1,323.9
						1,614.4
2,047.7						2,047.7
2,320.9						2,320.9
2,319.4						2,319.4
2,657.4						2,657.4
2,917.1						2,917.1
2,803.9					6.1	2,810.0
2,354.9					6.0	2,360.9
2,367.4		35.5			7.2	, -
2,966.9		419.7			5.7	3,392.3
2,813.8		319.8				3,141.9
	581.7	395.4			8.4	3,920.6
3,074.8	644.9	366.7				4,093.1
2,258.7		290.6	387.7			3,453.9
						3,904.3
						3,068.3
						4,161.1
	512.9		668.1		5.7	3,792.4
2,229.9	497.4	316.5	674.3			3,762.2
2,635.1	562.3	368.4	699.8			4,305.0
2,613.0	558.6	308.1		30.6	7.7	4,222.6
2,814.7	551.7	354.2	666.9	45.1	7.4	4,440.0
3,282.3	658.4	459.0	602.9	34.4		5,044.7
2,587.7	552.1	402.6	808.5			4,393.6
2,785.9	597.7	352.3	793.2	36.9	8.7	4,574.6
2,845.8	599.1	407.5	734.9			4,629.5
2,609.2	553.9	408.7	650.4	32.0	8.3	4,262.5
3,088.2	649.1	345.7	674.9			,
3,115.0	636.9	388.0	836.8	36.4	3.5	5,016.7
	1,302.2 1,281.9 1,323.9 1,614.4 2,047.7 2,320.9 2,319.4 2,657.4 2,917.1 2,803.9 2,354.9 2,367.4 2,966.9 2,813.8 2,935.1 3,074.8 2,258.7 2,391.1 1,864.5 2,472.2 2,310.2 2,229.9 2,635.1 2,613.0 2,814.7 3,282.3 2,587.7 2,785.9 2,845.8 2,609.2 3,088.2	1,302.2 1,281.9 1,323.9 1,614.4 2,047.7 2,320.9 2,319.4 2,657.4 2,917.1 2,803.9 2,354.9 2,367.4 2,966.9 2,813.8 2,935.1 3,074.8 644.9 2,258.7 511.8 2,391.1 502.8 1,864.5 380.6 2,472.2 382.1 2,310.2 512.9 2,229.9 497.4 2,635.1 562.3 2,613.0 558.6 2,814.7 3,282.3 658.4 2,587.7 552.1 2,785.9 597.7 2,845.8 599.1 2,609.2 3,088.2	1,302.2 1,281.9 1,323.9 1,614.4 2,047.7 2,320.9 2,319.4 2,657.4 2,917.1 2,803.9 2,354.9 2,367.4 3,074.8 644.9 366.7 2,258.7 511.8 290.6 2,391.1 502.8 2,391.1 502.8 2,391.1 502.8 2,391.1 502.8 2,391.1 502.8 2,391.1 502.8 2,391.1 502.8 2,391.1 502.8 2,391.1 502.8 2,391.1 502.8 2,472.2 382.1 2,310.2 2,472.2 382.1 2,310.2 512.9 271.5 2,229.9 497.4 316.5 2,635.1 562.3 368.4 2,613.0 558.6 308.1 2,587.7 552.1 402.6 2,785.9 597.7 352.3 2,845.8 599.1 407.5 2,609.2 3,088.2 649.1 345.7	1,302.2 1,281.9 1,323.9 1,614.4 2,047.7 2,320.9 2,319.4 2,657.4 2,917.1 2,803.9 2,354.9 2,367.4 3,074.8 4,49.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 644.9 3,074.8 6,08.1 6,	BAY D'ESPOIR UPPER SALMON HINDS LAKE CAT ARM RIVER 1,302.2 1,281.9 1,323.9 1,614.4 4	BAY D'ESPOIR 1,302.2 1,281.9 1,323.9 1,614.4 2,047.7 2,320.9 2,319.4 2,657.4 2,917.1 2,803.9 2,364.9 35.5 6.0 2,364.9 2,966.9 419.7 2,813.8 319.8 8.3 2,935.1 581.7 395.4 4.3 3.074.8 644.9 366.7 2,258.7 511.8 290.6 387.7 5.1 2,391.1 502.8 263.8 740.4 6.2 3,564.9 3.3 6.0 2,329 497.4 316.5 668.1 24.0 5.7 2,229.9 497.4 316.5 6674.3 38.1 6.0 2,229.9 497.4 316.5 674.3 38.1 6.0

Page 1 of 1

Q. Provide the data and rationale used to determine the Island Interconnected
 hydraulic production for the 2002 Forecast Cost of Service year.

3

5 A. Please refer to the response to NP-44.

1	Q.	With reference to Budgell's evidence page 16, lines 7 – 8, what is Hydro's
2		rationale for the recommendation on assignment on the Great Northern
3		Peninsula?
4		
5	A.	The plant on the Great Northern Peninsula has been assigned as per the
6		Board's recommendations on page 33 of its report entitled "Report of the
7		Board of Commissioners of Public Utilities to the Honourable Minister of
8		Mines and Energy, Government of Newfoundland and Labrador on a Referral
9		by the Lieutenant-Governor in Council Concerning Rural Electrical Service",
10		dated July 29, 1996.

Q. With reference to Budgell's evidence page 20, lines 16 – 20, what is the
 rationale for changing the plant assignment of Doyles – Port-aux-Basques
 line & terminal station to common?

4

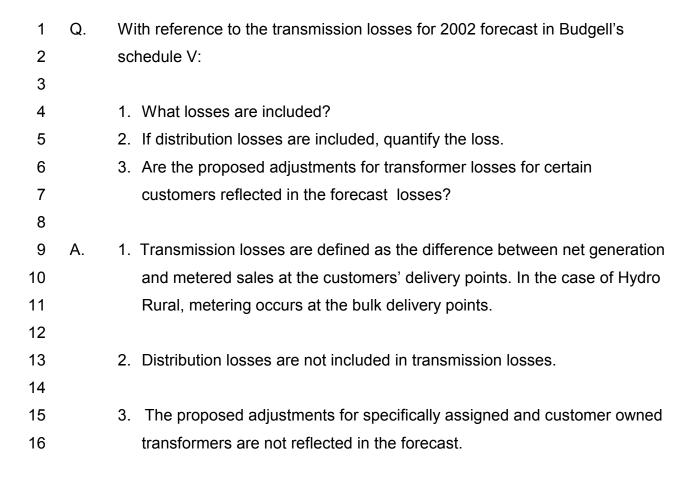
5 Α. The plant assignment of the Doyles – Port-aux-Basques lines, TL214 and 6 TL215, and the Doyles Terminal Station was changed to common to make 7 the assignment consistent with the Board's recommendation on assignment 8 on the Great Northern Peninsula as outlined on page 33 of its report entitled 9 "Report of the Board of Commissioners of Public Utilities to the Honourable 10 Minister of Mines and Energy, Government of Newfoundland and Labrador 11 on a Referral by the Lieutenant-Governor in Council Concerning Rural 12 Electrical Service", dated July 29, 1996.

1 Q. Reconcile the 6346.4 gwh for total sales & bulk deliveries for 2002 forecast in Budgell's schedule V with the 6287.568 gwh in Brickhill's schedule 1.3.2.

3

4 A.

Reconciliation of Sales as per Budgell and B	rickhill
Total Sales and Bulk Deliveries per Schedule V, H.G.Budgell	6346.400 GWh
Energy excluded from Sales and Bulk Deliveries	
Hydro Rural distribution losses	(27.860) GWh
Compensation of energy for Abitibi Consolidated	(31.000) GWh
Rounding differences	0.028 GWh
Total Sales	6287.568 GWh
Total Sales per Exhibit JAB-1, page 21	6287.568 Gwh



Q. With respect to the interconnected diesel units at Roddickton, Hawke's Bay 1 2 and St. Anthony, at the time of the last rate referral resulting in the 1992 3 Report, were these diesel units treated as common plant or specifically 4 assigned? Provide an answer for each unit. 5 6 Α. At the time of the last rate referral, which resulted in the 1992 Report, only 7 the Hawke's Bay Diesel Plant was connected to the Island Interconnected 8 System. The Hawke's Bay Diesel Plant was assigned common at that time. 9 The Roddickton and St. Anthony diesel units were connected to the isolated

St. Anthony – Roddickton system and were specifically assigned.

10

1	Q.	If any of the Roddickton, Hawke's Bay and St. Anthony diesel unit costs were
2		specifically assigned at the time of the 1992 Report, to which class of
3		customer were they assigned at that time?

A. At the time of the 1992 Report, the Roddickton and St. Anthony diesel units were connected to the isolated St. Anthony – Roddickton system and were specifically assigned to Hydro Rural as part of the cost of service for all Isolated Rural Systems.

Q. With respect to the diesel units at St. Anthony, Roddickton and Hawkes Bay,
 what was the average annual revenue from energy generated by each of
 these units in each of the years since they were interconnected?

4

5

6

A. The average annual revenue for the Island Interconnected System is as follows:

Year	Average Revenue per kWh
1996	4.56¢
1997	4.66¢
1998	4.78¢
1999	4.82¢
2000	4.69¢

1	Q.	What is Hydro's "firm energy requirement" for 2002?
2		
3	A.	Hydro's "firm energy requirement" for 2002 is 6,573.0 GWh for the Island
4		Interconnected system and 914.6 GWh for the Labrador Interconnected
5		system. There are no interruptible or secondary sales on the Rural Isolated
6		systems.

- What were Hydro's "firm energy requirements" in each of 1990 2000, both Q. 1
- 2 forecast and actual?

4 See attached. A.

Forecast	Compilation	Fall 1989	Fall 1990	Fall 1991	Fall 1992	Fall 1993	Fall 1994	Fall 1995	Fall 1996	Winter 1998	Fall 1998	Fall 1999	Fall 2000
	Actuals	NLH LA	BRADOR	INTERCO	ONNECTE	D NET S	UPPLY (C	GWh)				I	Page 3 of 3
1990	636.9	757.4											
1991	637.5	773.0	714.1										
1992	703.1		776.6	721.6									
1993	716.6		777.8		832.0								
1994	840.0		781.8		842.9	761.8							
1995	833.7		785.3		846.6	772.8	890.1						
1996	865.2				850.4	776.5	892.3	873.9					
1997	923.9				853.8	779.8	893.8	877.2	860.1				
1998	835.9					783.4	895.1	880.1	862.3	1141.4			
1999	645.3						896.1	882.3	865.4	1307.6	937.1		
2000	890.0							884.1	868.0	1305.6	1096.2	1067.7	
2001									870.3	1322.8	1279.6	1088.5	1026.2
2002										1325.1	1283.5	1163.3	1042.3
2003											1287.1	1176.5	1041.8
2004												1184.5	1049.4
2005													1060.0
		Notes: Fa	all 1989 fore	cast nrenar	ed for 2 full	vears: Fall 1	1991 Foreca	ast prepared	for 1 full ve	ear: No foreca	st prepared	l in fall 1997	,

Notes: Fall 1989 forecast prepared for 2 full years; Fall 1991 Forecast prepared for 1 full year; No forecast prepared in fall 1997.

Actuals NLH LABRADOR INTERCONNECTED SECONDARY SALES (GWh)

1990	54.8	99.8											
1991	50.0	81.2	68.8										
1992	77.4		118.8	126.0									
1993	100.8		112.1		143.9								
1994	122.6		108.6		141.6	119.1							
1995	128.0		105.7		138.7	119.0	126.4						
1996	132.2				136.1	118.1	123.6	120.9					
1997	120.4				133.6	117.2	121.0	118.9	128.8				
1998	117.6					116.3	118.5	117.2	126.5	158.2			
1999	81.8						116.2	115.1	124.1	207.0	117.7		
2000	86.8							113.4	121.7	215.5	117.5	116.4	
2001									119.4	217.0	114.5	114.0	104.2
2002										213.4	111.6	112.9	115.3
2003											109.9	111.9	112.0
2004												112.3	115.6
2005													122.4

Actuals NLH LABRADOR INTERCONNECTED FIRM ENERGY REQUIREMENTS (GWh)

1990	582.1	657.6											
1991	587.5	691.8	645.3										
1992	625.7		657.8	595.6									
1993	615.8		665.7		688.1								
1994	717.4		673.1		701.3	642.7							
1995	705.7		679.6		707.9	653.8	763.7						
1996	733.0				714.3	658.4	768.7	753.0					
1997	803.5				720.2	662.6	772.8	758.3	731.3				
1998	718.3					667.1	776.6	762.9	735.8	983.2			
1999	563.5						779.9	767.2	741.3	1100.6	819.4		
2000	803.2							770.7	746.3	1090.1	978.7	951.3	
2001									750.9	1105.8	1165.1	974.5	922.0
2002										1111.7	1171.9	1050.4	927.0
2003											1177.2	1064.6	929.8
2004												1072.2	933.8
2005													937.6
		Note: oct	iolo and for	popoto not o	divioted for I	00000							

Note: actuals and forecasts not adjusted for losses.

Q. Provide the actual customer operating load and the forecast customer
 operating loads for the Island Industrial customers, Newfoundland Power and
 Hydro Rural for each of the year 1992 – 2000.

4

5 A. See attached.

ſ	Forecast	Compilation	Fall 1991	Fall 1992	Fall 1993	Fall 1994	Fall 1995	Fall 1996	Fall 1997	Fall 1998	Fall 1999	Fall 2000
Ī												
			TARIF 1	- NI H SA	I ES TO N	EWFOUND	NO PO	WFR (GW	h)			
			IADLLI	- NEITO	LLO IO II	LWI OONE	LANDIO	WER (6W	•••			Page 2 of 4
		ACTUALS		T	1	1						
	1992	4243	4284.1									
	1993	4215	4463.1	4173.1								
	1994	4201	4641.0	4310.2	4202.3							
	1995	4214	4793.4	4428.6	4290.0	4293.6						
	1996	4187	4950.8	4554.3	4385.5	4394.9	4233.8					
	1997	4306		4683.6	4432.4	4456.5	4218.0	4217.5				
	1998	4157			4480.0	4517.3	4215.5	4265.7	4253.6			
	1999	4084				4578.9	4238.1	4329.5	4320.3	4310.8		
	2000	4263					4260.9	4420.1	4408.3	4398.0	4358.2	
	2001							4512.5	4491.7	4437.0	4418.2	4399.4
	2002								4576.5	4479.5	4475.4	4454.8
	2003									4522.6	4551.6	4526.1
	2004										4633.0	4609.3
	2005											4642.3
			TARIF 2	- NI H SA	I FS TO C	PP/DLP (G	Wh)					
		ACTUALS	IADLL	- ILLII OA	LLO IO O		, , , , , , , , , , , , , , , , , , ,					
	1992	314.8	328.9									
	1992	309.9	328.9	300.6								
	1993	211.6	328.9	300.6	302.3							
	1994	259.8	328.9	300.4	302.3	310.0						
	1996	329.7	328.9	272.7	303.1	339.4	360.5					
	1997	345.2	320.9	271.9	310.9	338.4	391.4	375.9				
	1998	406.1		271.5	310.9	338.4	391.4	399.3	387.0			
	1999	330.4			010.0	338.4	391.4	423.1	466.2	439.7		
	2000	376.4				000.4	391.4	424.2	520.4	511.4	417.1	
	2001	070.4					001.4	423.1	520.4	511.4	502.8	406.8
	2002							120.1	520.4	511.4	504.4	523.3
	2003								020.1	511.4	510.4	518.2
	2004									011.1	514.1	514.0
	2005										01	514.0
												01110
			TABLE 3	- NLH SA	LES TO A	CGF (GWI	n)					
		ACTUALS					,					
	1992	154.6	216.6									
	1993	161.5	216.6	203.3								
	1994	164.6	216.6	195.5	153.0							
	1995	178.3	216.6	195.5	153.0	184.0						
	1996	209.3	216.6	186.9	153.0	218.7	202.5					
	1997	163.2		186.9	153.0	204.9	268.3	211.4				
	1998	90.8			153.0	188.9	237.1	208.9	214.0			
	1999	135.4				188.9	178.4	208.9	214.0	214.0		
	2000	145.0					178.4	208.9	214.0	214.0	214.0	
	2001							208.9	214.0	214.0	214.0	177.3
	2002								214.0	214.0	214.0	177.3
	2003									214.0	214.0	177.3
	2004										214.0	177.3
	2005											177.3

	Compilation	Fall 1991	Fall 1992	Fall 1993	Fall 1994	Fall 1995	Fall 1996	Fall 1997	Fall 1998	Fall 1999	Fall 2000
		TABLE 4	- NLH SA	LES TO A	CSV (GWI	1)					Page 3 of
	ACTUALS										
1992	489.4	489.4									
1993	513.3	489.4	510.7								
1994	530.0	489.4	514.0	528.6							
1995	525.2	489.4	514.4	531.5	540.6						
1996	457.8	489.4	514.7	531.5	542.2	533.0					
1997	497.0		515.1	531.5	459.7	540.0	505.9				
1998	297.1			531.5	459.7	547.0	576.6	541.1			
1999	517.6				459.7	554.0	576.6	560.1	563.9		
2000	537.7					561.0	576.6	569.1	566.9	551.7	
2001							576.6	569.1	569.7	554.4	560.0
2002								569.1	569.7	565.5	568.6
2003									569.7	564.4	568.6
2004										566.0	568.6
2005											568.6
	ACTUALS	IABLE 3	- NLH 3F	LES ION	ARL (GWI	')					
1992	180.4	223.8									
993	207.6	223.8	201.6								
994	108.7	223.8	201.6	201.6							
995	194.5	223.8	201.6	201.6	233.7						
996	228.8	223.8	201.6	201.6	233.7	218.2					
1997	244.8		201.6	201.6	233.7	195.8	229.8				
998	193.7			201.6	233.7	195.8	239.0	253.5			
					233.7	217.6	229.7	246.5	246.5		
999	224.8					196.4	230.4	254.2	254.2	234.4	
	224.8 219.7										
2000							229.8	246.5	246.5	233.7	233.6
:000 :001							229.8	246.5 253.5	246.5 253.5	233.7 233.7	233.6 233.6
2000 2001 2002							229.8				
2000 2001 2002 2003							229.8		253.5	233.7	233.6 233.6
000 001 002 003 004							229.8		253.5	233.7 233.7	233.6 233.6 233.6
2000 2001 2002 2003 2004		TABLES	NULLO	150 TO 11					253.5	233.7 233.7	233.6
2000 2001 2002 2003 2004		TABLE 6	- NLH SA	LES TO H	OPE BROO				253.5	233.7 233.7	233.6 233.6 233.6
000 001 002 003 004 005	219.7	TABLE 6	- NLH SA	LES TO H	OPE BROO				253.5	233.7 233.7	233.6 233.6 233.6
0000 0001 0002 0003 0004 0005	219.7		- NLH SA	ALES TO H	OPE BROO				253.5	233.7 233.7	233.6 233.6 233.6
2000 2001 2002 2003 2004 2005	219.7 ACTUALS 41.0	6.7		ALES TO H	OPE BROO				253.5	233.7 233.7	233.6 233.6 233.6
2000 2001 2002 2003 2004 2005 992 993 994	219.7 ACTUALS 41.0 74.5	6.7 6.7	61.4		OPE BROO				253.5	233.7 233.7	233.6 233.6 233.6
2000 2001 2002 2003 2004 2005 992 993 994 995	ACTUALS 41.0 74.5 72.5 70.3	6.7 6.7 6.7 6.7	61.4 61.4	70.4					253.5	233.7 233.7	233.6 233.6 233.6
2000 2001 2002 2003 2004 2005 1992 1993 1994 1995 1996	ACTUALS 41.0 74.5 72.5 70.3 67.2	6.7 6.7 6.7	61.4 61.4 61.4 61.4	70.4 70.4	78.7	72.0	(GWh)		253.5	233.7 233.7	233.6 233.6 233.6
992 993 994 995 997	ACTUALS 41.0 74.5 72.5 70.3 67.2 43.8	6.7 6.7 6.7 6.7	61.4 61.4 61.4	70.4 70.4 70.4 70.4	78.7 78.7 78.7	72.0 72.0		253.5	253.5	233.7 233.7	233.6 233.6 233.6
992 993 994 995 997 998	ACTUALS 41.0 74.5 72.5 70.3 67.2 43.8 0.0	6.7 6.7 6.7 6.7	61.4 61.4 61.4 61.4	70.4 70.4 70.4	78.7 78.7 78.7 78.7	72.0 72.0 72.0 72.0	(GWh)		253.5	233.7 233.7	233.6 233.6 233.6
2000 2001 2002 2003 2004 2005 1992 1993 1994 1995 1996 1997 1998 1999	ACTUALS 41.0 74.5 72.5 70.3 67.2 43.8 0.0 0.0	6.7 6.7 6.7 6.7	61.4 61.4 61.4 61.4	70.4 70.4 70.4 70.4	78.7 78.7 78.7	72.0 72.0 72.0 72.0 72.0	(GWh) 49.5	0.3	253.5 246.5	233.7 233.7	233.6 233.6 233.6
2000 2001 2002 2003 2004 2005 1992 1993 1994 1995 1996 1997 1998 1999 2000	ACTUALS 41.0 74.5 72.5 70.3 67.2 43.8 0.0	6.7 6.7 6.7 6.7	61.4 61.4 61.4 61.4	70.4 70.4 70.4 70.4	78.7 78.7 78.7 78.7	72.0 72.0 72.0 72.0	(GWh) 49.5	0.3	253.5 246.5	233.7 233.7 234.4	233.6 233.6 233.6
2000 2001 2002 2003 2004 2005 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001	ACTUALS 41.0 74.5 72.5 70.3 67.2 43.8 0.0 0.0	6.7 6.7 6.7 6.7	61.4 61.4 61.4 61.4	70.4 70.4 70.4 70.4	78.7 78.7 78.7 78.7	72.0 72.0 72.0 72.0 72.0	(GWh) 49.5	0.3	253.5 246.5	233.7 233.7 234.4	233.6 233.6 233.6
2000 2001 2002 2003 2004 2005 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002	ACTUALS 41.0 74.5 72.5 70.3 67.2 43.8 0.0 0.0	6.7 6.7 6.7 6.7	61.4 61.4 61.4 61.4	70.4 70.4 70.4 70.4	78.7 78.7 78.7 78.7	72.0 72.0 72.0 72.0 72.0	(GWh) 49.5	0.3	253.5 246.5	233.7 233.7 234.4	233.6 233.6 233.6 233.6
1999 2000 2001 2002 2003 2004 2005 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004	ACTUALS 41.0 74.5 72.5 70.3 67.2 43.8 0.0 0.0	6.7 6.7 6.7 6.7	61.4 61.4 61.4 61.4	70.4 70.4 70.4 70.4	78.7 78.7 78.7 78.7	72.0 72.0 72.0 72.0 72.0	(GWh) 49.5	0.3	253.5 246.5	233.7 233.7 234.4	233.6 233.6 233.6 233.6

									200	1 General Ra	te Application
Forecast C	ompilation	Fall 1991	Fall 1992	Fall 1993	Fall 1994	Fall 1995	Fall 1996	Fall 1997	Fall 1998	Fall 1999	Fall 2000
											Page 4 of 4
		TABLE 7	- NLH SA	LES TO H	YDRO ISL	AND INTER	RCONNEC	TED RURA	L (GWh)		
	ACTUALS				7				7		
1992	295.5	301.8									
1993	300.5	309.5	309.9								
1994	299.1	316.8	321.3	311.1							
1995	286.2	323.9	331.9	321.1	314.0						
1996	308.8	330.4	339.9	327.8	328.0	291.7					
1997	359.2		348.0	334.2	375.8	344.4	358.0				
1998	361.3			340.6	386.9	352.8	365.4	374.3			
1999	370.5				396.0	361.1	372.1	373.0	370.1		
2000	388.8					368.4	377.5	380.1	372.6	370.0	
2001							382.3	381.5	374.8	371.6	398.1
2002								387.7	377.3	372.9	388.9
2003									379.4	374.3	394.1
2004										375.6	399.9
2005											403.9

1	Q.	Explain how the changes in bulk metering for bulk deliveries to Hydro's Rural
2		Interconnected Customers affects the forecast for bulk deliveries to that class
3		staring in 2002.

- 5 A. The change in bulk metering (i.e. to allocate GNP 138 kV transmission 6 losses to common from specifically assigned) reduces Hydro Rural
- 7 Interconnected bulk deliveries by 10 GWh in 2002.