Q. (a) Provide the excerpts from the legislation to support, in Hydro's view, the statement "the legislative amendments indicate that, as a matter of public policy, Hydro is intended to operate as a fully regulated utility, more similar to that of an investor-owned utility" (WEW, page 6 lines 20-22).
(b) In addition to the legislation, what does Hydro view as the similarities between the way Hydro is intended to operate and the manner in which an investor-owned utility operates?
A. (a) Pursuant to Chapter 37 of the Statutes of Newfoundland 1995, there were a series of legislative amendments affecting Hydro. The effect of these amendments was to repeal certain provisions that had existed under the Hydro Corporation Act, Revised Statutes of Newfoundland, 1990, as amended to that time, and under various other statutes. Prior to the repealing of these provisions, a number of special legislative treatments usually associated with crown corporations and government agencies had applied to Hydro.

Section 5 of Chapter 37 reads as follows:
"5. Section 14 of the Act is repealed."

Section 14 of the Hydro Corporation Act provided Hydro with the exclusive franchise to develop all previously un-granted hydroelectric sites on the island portion of the province.
"6. Paragraph 16(1)(h) of the Act is repealed and the following substituted:
"(h) deposit money or securities with a bank, trustee, trust company, or other depository in Canada or outside Canada;"
Prior to this amendment, the prior approval of the LieutenantGovernor in Council was required to deposit money or securities outside Canada.

Section 7 of Chapter 37 starts as follows:
"7. Sections 17, 18, 19, 20 and 21 of the Act are repealed . . . ."

Under section 17, Hydro had access to special powers of expropriation under the Expropriation Act. Section 19 provided Hydro with the ability to obtain rights to water powers and lands through an assurance of the Lieutenant-Governor in Council. Under sections 20 and 21, respectively, Hydro was exempt from the Crown Lands Act and the Public Utilities Act.

Section 8 of Chapter 37 reads as follows:
"8. Sections 22 and 23 of the Act are repealed."

Under section 22, Hydro was subject to the Public Service Collective Bargaining Act. Subsection 19(1) of the Hydro Corporation Act as amended by Chapter 37 reads as follows:
"19.(1) The Labour Relations Act applies to the corporation."

Section 10 of Chapter 37 reads as follows:
"10. Section 26 of the Act is repealed."
Section 26 of the Hydro Corporation Act provided Hydro with certain rights to obtain franchise rights to those hydro-electric sites in Labrador not subject to prior grants by the Crown.

Section 11 of Chapter 37 reads as follows:
"11. Subsection 40(2) of the Act is repealed."

Subsection 40(2) of the Hydro Corporation Act required Hydro to obtain the approval of the Lieutenant-Governor in Council for borrowing programs reflected in its budget.

Section 12 of Chapter 37 reads as follows:
"12. Subsection $41(3)$ of the Act is repealed and the following substituted:
"(3) The annual financial statement of the corporation shall be audited by a firm of auditors."

Prior to this amendment, the Act provided that the auditors be appointed by the Lieutenant-Governor in Council.

Section 13 of Chapter 37 reads as follows:
"13. Subsections 44(3), (4) and (6) and sections 45, 46, $47,48,49$ and 50 of the Act are repealed."

Among other things, these provisions had provided Hydro and its directors special protections and limitation periods in litigation against them.

Section 20 of Chapter 37 reads as follows:
"20. Subsection 50(4) of the Crown Lands Act is repealed."

Section 21 of Chapter 37 reads as follows:
"21. The schedule to the Freedom of Information Act is amended by deleting the words "The Newfoundland and Labrador Hydro Corporation".

Section 23 of Chapter 37 reads as follows:
"23(1) Paragraph 2(b) of the Public Tender Act is amended by striking out the semicolon at the end of subparagraph (viii) and by substituting a comma and by adding immediately after subparagraph (viii) the following:
but does not include
(ix) Newfoundland and Labrador Hydro
(2) the Schedule to the Act is amended by deleting the words "Newfoundland and Labrador Hydro"."

The Electrical Power Control Act, 1994 revised the power policies that had earlier been set out in the Electrical Power Control Act. The legislature removed from the 1994 statute the special treatment that had existed for Hydro as to the margin of profit. The provision that applies at present is the same for Hydro as it is for Newfoundland Power:
"3. It is declared to be the policy of the province that (a) the rates to be charged, either generally or under specific contacts, for the supply of power within the province
(iii) should provide sufficient revenue to the producer or retailer of the power to enable it to earn a just and reasonable return as construed under the Public Utilities Act so that it is able to achieve and maintain a sound credit rating in the financial markets of the world . . ."
(b) Hydro views the following similarities between the way Hydro is intended to operate and the manner in which an investor-owned utility operates.

- Operate in an efficient and least cost basis
- Achieve an appropriate return on rate base
- Achieve an appropriate return on equity
- Achieve appropriate debt/equity ratios
- Provide an appropriate dividend payout
Q. What does Hydro view as the differences, if any, between the way Hydro is intended to operate and the manner in which an investor-owned utility operates (WEW, page 6, lines 20-22)?
A. Hydro views the following as the main differences between the way Hydro is intended to operate and the manner in which an investor-owned utility operates:
- As a Crown Corporation Hydro may receive directions from its shareholder, the Government of Newfoundland and Labrador, which reflects social or public policy considerations, not in conflict with legislation, which Hydro will implement.
- Hydro's ability to borrow and its borrowing program is influenced by the fact its debt is guaranteed by the Province. By having its debt guaranteed by the Province, Hydro is able to access capital markets under virtually all conditions and to borrow at a lower cost, which results in a lesser cost to customers.
- As a Crown Corporation, Hydro is not subject to corporate income taxes.

4 A. Please see attached schedule.


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2001 General Rate Application
Page 1 of 1

1 Q. Provide the details of:
(a) redemptions of long-term debt from 1992 to 2000; and

4
5 A.
(a) Please see schedule below.

6 (b) Please see schedule below.
(b) anticipated future redemptions from 2001 to 2006 (JCR, Schedule X).

| Issue Date | Coupon | Series | Original Par Value (\$000) | Currency | Canadian |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Historical FX Rate | Equiv $(\$ 000)$ | Final Maturity Date |
| 4/1/72 | 8.125\% |  | 15,000 | Cdn | N/A | 15,000 | 4/1/92 |
| 5/15/82 | 15.125\% |  | 100,000 | US | 1.24072 | 124,072 | 5/15/92 |
| 5/1/68 | 7.750\% |  | 25,000 | US | 1.07093 | 26,773 | 5/1/93 |
| 12/15/75 | 10.750\% |  | 25,000 | Cdn | N/A | 25,000 | 12/15/93 |
| 4/2/79 | 9.875\% |  | 50,000 | US | 1.15594 | 57,797 | 4/2/94 |
| 8/1/69 | 9.000\% |  | 15,000 | US | 1.07500 | 16,125 | 8/1/94 |
| 7/15/86 | 9.875\% | S | 100,000 | Cdn | N/A | 100,000 | 7/15/96 |
| 3/15/74 | 8.875\% |  | 20,000 | Cdn | N/A | 20,000 | 4/15/97 |
| 11/15/85 | Various |  | 7,000,000 | Yen | 0.00534 | 37,349 | 5/28/97 |
| 6/1/75 | Various |  | 75,000 | SF | 0.37715 | 28,286 | 6/16/97 |
| 9/28/77 | 10.000\% | $J$ | 35,000 | Cdn | N/A | 35,000 | 9/28/97 |
| 12/15/87 | 10.500\% | T | 100,000 | Cdn | N/A | 100,000 | 12/15/97 |
| 12/15/79 | 11.250\% | M | 75,000 | Cdn | N/A | 75,000 | 12/15/97 |
| 11/15/85 | 11.250\% |  | 35,000 | Cdn | N/A | 35,000 | 12/15/97 |
| 6/27/78 | 10.000\% | L | 40,000 | Cdn | N/A | 40,000 | 6/27/98 |
| 8/2/88 | 9.875\% | U | 100,000 | Cdn | N/A | 100,000 | 8/2/98 |
| 10/15/76 | 10.250\% |  | 30,000 | Cdn | N/A | 30,000 | 10/15/98 |
| 3/1/78 | 10.250\% | K | 35,000 | Cdn | N/A | 35,000 | 10/15/98 |
| 1/30/81 | 13.375\% | N | 75,000 | Cdn | N/A | 75,000 | 1/30/99 |
| 5/9/77 | 10.000\% |  | 30,000 | Cdn | N/A | 30,000 | 5/9/99 |

(b) Anticipated future redemptions from 2001 to 2006:

| $9 / 17 / 91$ | $10.750 \%$ | W | 150,000 | Cdn | N/A | 150,000 | $9 / 17 / 01$ |
| ---: | ---: | :--- | ---: | :--- | :--- | ---: | ---: |
| $10 / 10 / 97$ | $5.250 \%$ | Z | 100,000 | Cdn | N/A | 100,000 | $10 / 10 / 02$ |
| $9 / 1 / 01$ | $5.300 \%$ |  | 100,000 | Cdn | N/A | 100,000 | $9 / 1 / 06$ |

NP-79
Q. Provide details of the projected impact on revenue requirement of the realized foreign exchange loss for each year from 2002 to 2006. Identify the annual amortization portion separately from the return on rate base (JCR, page 8, line 25).
A. Assuming a weighted average cost of capital of $7.39 \%$ as per the 2002 test year, the return on ratebase below is the projected impact of the foreign exchange loss on revenue requirement.

|  | 2002 | 2003 | (\$thousands) |  | 2006 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2004 | 2005 |  |
| Average Unamortized |  |  |  |  |  |
| Foreign Exchange Loss | 85,200 | 83,043 | 80,886 | 78,729 | 76,572 |
| Revenue Requirement | 6,304 | 6,144 | 5,985 | 5,825 | 5,666 |
| Amortization | 2,157 | 2,157 | 2,157 | 2,157 | 2,157 |

Q. Treat the debt guarantee fee as a component of return on equity rather than interest expense and recalculate return on equity as a percentage for each year from 1992 to 2000 and forecast for 2001 and 2002.
A. Attached is the calculation of Hydro's return on equity, treating the debt guarantee fee as a component of return rather than interest expense.

## 1 Q. Provide detailed calculations of the interest rate projections for 2001 and <br> 2 2002 (JCR, page 6, line 27).

3

## 4 A. Please see schedule below.

|  | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Average | Selection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Institution | $\underline{\underline{2001}}$ | $\underline{\underline{2001}}$ | $\underline{\underline{2001}}$ | $\underline{\underline{2001}}$ |  | Qtr 3 | Qtr 4 |  |
| 91-Day Treasury Bills | 4.75\% | 4.24\% | 4.15\% | 4.28\% | 4.35\% | 4.35\% | $4.48 \%$ | ( includes 20 Basis Point Spread for NLH CI |
| CIBC/W.Gundy | 4.49\% | 3.80\% | 3.35\% | 3.70\% | 3.84\% |  |  |  |
| Merrill Lynch | 5.00\% | 4.60\% | 4.65\% | 4.75\% | 4.75\% |  |  |  |
| Nesbitt Burns | 5.00\% | 4.35\% | 4.25\% | 4.20\% | 4.45\% |  |  |  |
| RBCDS | 4.60\% | 4.50\% | 4.60\% | 4.60\% | 4.58\% |  |  |  |
| ScotiaMcleod | 4.64\% | 3.95\% | 3.90\% | 4.15\% | 4.16\% |  |  |  |
| 5 Year Canadas | 5.10\% | 4.96\% | 4.99\% | 5.11\% | 5.04\% | 5.33\% |  | ( includes 34 Basis Point Spread for NLH C। |
| CIBC/W.Gundy (note) | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |  |  | Based on Planned Borrowing during Q3 |
| Merrill Lynch | 5.10\% | 5.00\% | 5.15\% | 5.35\% | 5.15\% |  |  |  |
| Nesbitt Burns | 5.12\% | 4.75\% | 4.70\% | 4.65\% | 4.81\% |  |  |  |
| RBCDS | 5.10\% | 5.40\% | 5.55\% | 5.65\% | 5.43\% |  |  |  |
| ScotiaMcleod | 5.08\% | 4.70\% | 4.55\% | 4.80\% | 4.78\% | N/A |  |  |
| 10 Year Canadas | 5.34\% | 5.18\% | 5.19\% | 5.35\% | 5.27\% |  |  |  |
| CIBC/W.Gundy | 5.22\% | 4.85\% | 4.80\% | 5.15\% | 5.01\% |  |  |  |
| Merrill Lynch | 5.35\% | 5.25\% | 5.45\% | 5.65\% | 5.43\% |  |  |  |
| Nesbitt Burns | 5.38\% | 5.15\% | 5.10\% | 5.05\% | 5.17\% |  |  |  |
| RBCDS | 5.35\% | 5.60\% | 5.65\% | 5.75\% | 5.59\% |  |  |  |
| ScotiaMcleod | 5.40\% | 5.05\% | 4.95\% | 5.15\% | 5.14\% |  |  |  |
| Long Canadas | 5.67\% | 5.52\% | 5.56\% | 5.68\% | 5.61\% | 6.26\% |  | ( includes 74 Basis Point Spread for NLH C। |
| CIBC/W.Gundy | 5.58\% | 5.25\% | 5.30\% | 5.50\% | 5.41\% |  |  | Based on Planned Borrowing during Q2 |
| Merrill Lynch | 5.65\% | 5.50\% | 5.70\% | 5.90\% | 5.69\% |  |  |  |
| Nesbitt Burns | 5.67\% | 5.45\% | 5.37\% | 5.30\% | 5.45\% |  |  |  |
| RBCDS | 5.65\% | 5.85\% | 6.00\% | 6.15\% | 5.91\% |  |  |  |
| ScotiaMcleod | 5.78\% | 5.55\% | 5.45\% | 5.55\% | 5.58\% |  |  |  |

Note: CIBC estimates were not available for 5 year term.

| Institution | $\begin{aligned} & \text { Qtr } 1 \\ & 2002 \end{aligned}$ | $\begin{aligned} & \text { Qtr } 2 \\ & 2002 \end{aligned}$ | $\begin{array}{r} \text { Qtr } 3 \\ \underline{\underline{2002}} \end{array}$ | $\begin{aligned} & \text { Qtr } 4 \\ & \underline{\underline{2002}} \\ & \hline \end{aligned}$ | Average | Selection |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 91-Day Treasury Bills | 4.59\% | 4.70\% | 4.87\% | 4.94\% | 4.58\% | avg +. 20 | ( includes 20 Basis Point Spread for NLH CI |
| CIBC/W.Gundy | 3.70\% | 3.45\% | 3.45\% | 3.40\% | 3.50\% |  |  |
| Merrill Lynch | 5.05\% | 5.35\% | 5.65\% | 5.75\% | 5.45\% |  |  |
| Nesbitt Burns | 4.15\% | 4.30\% | 4.40\% | 4.50\% | 4.34\% |  |  |
| RBCDS | 4.75\% | 4.90\% | 5.25\% | 5.40\% | 5.08\% |  |  |
| ScotiaMcleod | 4.30\% | 4.50\% | 4.60\% | 4.65\% | 4.51\% |  |  |
| 5 Year Canadas | 5.19\% | 5.30\% | 5.40\% | 5.41\% | 5.33\% | 5.53\% | ( includes 34 Basis Point Spread for NLH CI |
| CIBC/W.Gundy | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |  | Based on Planned Borrowing during Q1 |
| Merrill Lynch | 5.50\% | 5.65\% | 5.85\% | 5.80\% | 5.70\% |  |  |
| Nesbitt Burns | 4.60\% | 4.70\% | 4.75\% | 4.80\% | 4.71\% |  |  |
| RBCDS | 5.75\% | 5.90\% | 6.00\% | 6.00\% | 5.91\% |  |  |
| ScotiaMcleod | 4.90\% | 4.95\% | 5.00\% | 5.05\% | 4.98\% |  |  |
| 10 Year Canadas | 5.41\% | 5.48\% | 5.51\% | 5.49\% | 5.47\% | 6.14\% | ( includes 63 Basis Point Spread for NLH CI |
| CIBC/W.Gundy | 5.25\% | 5.25\% | 5.20\% | 5.20\% | 5.23\% |  | Based on Planned Borrowing during Q3 |
| Merrill Lynch | 5.75\% | 5.80\% | 6.00\% | 5.90\% | 5.86\% |  |  |
| Nesbitt Burns | 4.90\% | 4.95\% | 5.00\% | 5.05\% | 4.98\% |  |  |
| RBCDS | 5.90\% | 6.10\% | 6.05\% | 6.00\% | 6.01\% |  |  |
| ScotiaMcleod | 5.25\% | 5.30\% | 5.30\% | 5.30\% | 5.29\% |  |  |
| Long Canadas | 5.70\% | 5.73\% | 5.73\% | 5.69\% | 5.71\% | N/A |  |
| CIBC/W.Gundy | 5.55\% | 5.55\% | 5.50\% | 5.50\% | 5.53\% |  |  |
| Merrill Lynch | 6.00\% | 6.05\% | 6.15\% | 6.00\% | 6.05\% |  |  |
| Nesbitt Burns | 5.10\% | 5.15\% | 5.20\% | 5.25\% | 5.18\% |  |  |
| RBCDS | 6.25\% | 6.30\% | 6.20\% | 6.10\% | 6.21\% |  |  |
| ScotiaMcleod | 5.60\% | 5.60\% | 5.60\% | 5.60\% | 5.60\% |  |  |

NP-82
Q. Provide details of all sources that were consulted in determining the applicable spreads on forecast long-term debt (JCR, page 7, line 1).
A. Spreads were selected for forecasting 2001 and 2002 interest rate projections (yields) as provided by Scotia Capital for the Newfoundland Government credit on April 9, 2001, for the 5, 10 and 30-year term and were as follows:

The 5-year maturity at plus 34 basis points over the Government of Canada Benchmark Bond 8.75\% due December 2005.

The 10-year maturity at plus 63 basis points over the Government of Canada Benchmark Bond 6.00\% due June 2011.

The 30-year maturity at plus 75 basis points over the Government of Canada Benchmark Bond 5.75\% due June 2029.

These estimates were viewed in the context of similar estimates as provided by other members of the underwriting syndicate and were considered representative. Spread estimates from our advisors are based on actual market transactions, and do not normally vary by more than one or two basis points.
Q. Explain how the change from cost of debt to weighted average cost of capital impacts the forecast 2002 carrying charges for the RSP and CWIP. (JCR, page 8 , line 8 ).
A. The embedded cost of debt, calculated on a consistent basis as prior years would have been $8 \%$. As this is higher than the $7.4 \%$ weighted average cost of capital for 2002, the carrying charges for the RSP on CWIP are lower than they would otherwise have been.

$$
\frac{7.4 \%}{(\$ \text { thousands) }} \quad \text { Difference }
$$

RSP
6,646
7,185
539
CWIP
8,504
9,190 686
A. (a) Please see schedule below

2002 Year
Description
WACC Monthly Rate
Opening Balance
Preferred Dividends
CFL Divs to Province
Guarantee fee
Common Dividends
Budget Interest
Closing Balance

| JaN | FEB | MAR | APR | may | JUN | JuL | aUg | SEP | ост | Nov | dEC | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7.16\% | 7.16\% | 7.16\% | 7.16\% | 7.16\% | 7.16\% | 7.16\% | 7.16\% | 7.16\% | 7.16\% | 7.16\% | 7.16\% |  |
| 27,546 | 27,057 | 26,566 | 29,839 | 20,364 | 28,887 | 28,454 | 27,971 | 27,485 | 27,045 | 20,553 | 26,059 |  |
| 650 | 650 | 650 | 650 | 650 | 650 | 650 | 650 | 650 | 650 | 650 | 650 | 300 |
| - | - | $(4,644)$ | - | - | $(1,200)$ | - | - | $(1,200)$ | - |  | $(1,200)$ | (8,244) |
| - | - | (275) | - |  |  |  |  |  |  |  |  | (275) |
| - | - | 1,152 | - | - | 1,152 | - | - | 1,152 | - |  | 1,152 | 4,607 |
| 161 | 159 | 156 | 175 | 172 | 169 | 167 | 164 | 161 | 158 | 156 | 153 | 1,951 |
| 27,057 | 26,566 | 29,839 | 29,364 | 28,887 | 28,454 | 27,971 | 27,485 | 27,045 | 26,553 | 26,059 | 25,609 |  |

Average Balance Cfloo Share Purchase Debt 27,248

## This Dividend relates to 2001 results

Note: The monthly rate is applied to the opening monthly balance and is prorated based on days in the month to days in the year.
The rate is lower than the annual rate of $7.4 \%$ to reflect the impact of monthly compounding.
(b) As per a 1995 resolution of Hydro's Board of Directors, Hydro repays $\$ 1$ million annually on the outstanding principal balance.

4 A. Please see attachment to NP-84.

## NP-86

1 Q. Provide details of the \$94,151,000 Sinking Fund for 2002 (JCR, Schedule

4 A. Please see schedule below.

| Sinking Fund | Bond Issue Par Value | Maturity | Estimated Opening Balance | Annual Contr. | Estimated Annual Earnings | Estimated Closing Balance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10.500\% | 125,000 | 6/15/14 | 44,527 | 1,875 | 3,566 | 49,968 |
| 10.250\% | 150,000 | 7/14/17 | 20,995 | 1,500 | 1,552 | 24,047 |
| 8.400\% | 300,000 | 2/27/26 | 15,053 | 2,400 | 1,125 | 18,578 |
| 6.250\% | 150,000 | 6/1/31 | - | 1,500 | $\underline{57}$ | 1,557 |
|  |  | Total | 80,575 | 7,275 | 6,301 | 94,151 |

5 A. Please see attached document. short-term debt.
Q. Provide details of the calculation of the $\$ 101,662,000$ Interest Expense for 2002 (JCR, Schedule IX) identifying long-term debt by issue and applicable


## NP-88

4 A. Please see schedule below.

| Coupon | Maturity Date | Par Value | Proceeds | Total Discount | Total <br> Amortization <br> Period(Mths) | Monthly Amortization | $\begin{array}{r} 2002 \\ \text { Amortization } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10.500\% | 6/15/14 | 125,000 | 123,847 | 1,153 | 300 | 4 | 46 |
| 10.250\% | 7/14/17 | 150,000 | 148,565 | 1,435 | 300 | 5 | 57 |
| 8.400\% | 2/27/26 | 300,000 | 291,338 | 8,662 | 360 | 24 | 289 |
| 5.250\% | 10/10/02 | 100,000 | 98,924 | 1,076 | 60 | 18 | 215 |
| 5.500\% | 4/30/08 | 200,000 | 197,281 | 2,719 | 120 | 23 | 272 |
| 5.30\% | 9/1/06 | 100,000 | 99,470 | 530 | 60 | 9 | 106 |
| 6.25\% | 6/1/31 | 150,000 | 148,748 | 1,253 | 360 | 3 | 42 |
| EMS LEASE | 10/31/05 | - |  |  |  |  | 2 |
| 5.50\% | 3/31/07 | 100,000 | 99,470 | 530 | 60 | 9 | 80 |
| 6.10\% | 9/1/12 | 200,000 | 198,008 | 1,992 | 120 | 17 | 66 |
|  |  |  |  |  |  |  | 1,175 |

Note: All figures in \$000's.

## NP-89 <br> 2001 General Rate Application <br> Page 1 of 1

4 A. Please see attachment to NP-86.

NP-90
Q. Reconcile the $\$ 108,735,000$ cost of debt forecast for 2002 (JCR, Schedule IX) with the \$93,584,000 interest expense (JCR, Schedule I, line 40).
A. Net Interest, JCR, Schedule IX
Less: Interest earned, RSP
Interest capitalized
Rounding
\$ 108,735,000
6,646,000
8,504,000
1,000
Interest expense, JCR, Schedule I, line 40
$\$ \quad 93,584,000$

NP-91

1 Q. Provide summaries, both actual and prospective, of the terms of the sinking

4 A. Please see schedule below.

| Series | Interest <br> Rate | Year of <br> Issue | Year of <br> Maturity | (000's) <br> $\mathbf{2 0 0 1}$ | (000's) <br> $\mathbf{2 0 0 2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| Z | $5.25 \%$ | 1997 | 2002 | 100,000 | - | No Sinking Fund arrangement for this issue. |
| AA | $5.50 \%$ | 1998 | 2008 | 200,000 | 200,000 | No Sinking Fund arrangement for this issue. |
| V | $10.50 \%$ | 1989 | 2014 | 125,000 | 125,000 | $1.50 \%$ of Par Value (\$1,875,000) contributed each year |
| X | $10.25 \%$ | 1992 | 2017 | 150,000 | 150,000 | $1.00 \%$ of Par Value (\$1,500,000) contributed each year |
| Y | $8.40 \%$ | 1996 | 2026 | 300,000 | 300,000 | $0.80 \%$ of Par Value (\$2,400,000) contributed each year |
|  | $5.30 \%$ | 2001 | 2006 | 100,000 | 100,000 | No Sinking Fund arrangement for this issue. |
|  | $6.25 \%$ | 2001 | 2031 | 150,000 | 150,000 | $1.00 \%$ of Par Value (\$1,500,000) to be contributed each year |
|  | $5.50 \%$ | 2002 | 2007 | - | 100,000 | No Sinking Fund arrangement for this issue. |
|  | $6.10 \%$ | 2002 | 2012 | - | 200,000 | No Sinking Fund arrangement for this issue. |

NP-92
Q. Provide an explanation of why the 2002 borrowings are proposed as different maturities (JCR, Schedule $X$ ).
A. The determination of appropriate debt term is a question that is viewed in the context of our total debt portfolio. Key factors which we consider are market receptivity, the current debt maturity profile, and the impact on the weighted average term to maturity of our debt portfolio.

## Market Receptivity

We rely on our advisors to provide us with an indication of expected market receptivity for various debt terms.

## Our Current Debt Maturity Profile

Consideration must be given to the expected maturity dates of current debt issues. It is important to ensure, to the extent possible, a manageable financing burden in future years.

## Impact on Weighted Average Term to Maturity

Hydro annually benchmarks this measure with similar utilities and certain government entities, in an effort to determine our relative and desired positioning.
Q. Provide reports on the cost benefit analysis justifying the interconnection of the former diesel areas of Westport, Mud Lake and LaPoile (DWR, page 13, lines 14-19).
A. Copies of the reports/analysis for the former diesel areas of Westport, Mud Lake and LaPoile are attached.
Q. Provide details of the $\$ 107,453,000$ capital expenditures for 2002 (JCR, Schedule VI). Reconcile this amount with the $\$ 119,469,000$ net additions to capital assets (JCR, Schedule XIII).
A. Net additions to capital assets, JCR, Schedule XIII \$ 119,469,000

Classification error $(376,000)$

Adjusted net additions to capital assets, JCR Schedule XIII 119,093,000
less: Capitalized salaries, overhead
5,723,000
Interest capitalized
5,529,000
Capital leases

$$
388,000
$$

Capital expenses on which HST is payable JCR, Schedule VI $\$ \quad 107,453,000$

The $\$ 119$ million is comprised of the 2002 Capital Budget of $\$ 48$ million, plus additional capital expenditures of $\$ 71$ million which are exempted from the Board's jurisdiction.
Q. (a) Provide details of all capital and operating leases entered into by Hydro for the period 1992 to 2000 and forecast for 2001 and 2002 for which Board approval is required pursuant to Section 41 of the Public Utilities Act.
(b) How does Hydro determine whether to buy or lease capital assets?
A. (a) Attached are the capital and operating leases entered into by Hydro. 1997 was the first year that the Board approval was required pursuant to Section 41 of the Public Utilities Act.
(b) Where a leasing option is presented by a potential supplier, or requested by the Hydro Group, the requestor submits all necessary data regarding the leasing option to the Treasury Department. The Treasurer then performs lease versus purchase analysis to determine the most economic method of acquisition. There may be instances, when other considerations may factor into a lease or buy decision. For example, in cases of products experiencing rapid technological change, leasing may be advantageous to ensure Hydro retains the flexibility to upgrade to the most current technology.
Q. For the budget item identified below, provide the following information:

| Budget <br> Item | Amount | Description |
| :---: | :---: | :---: |
| B-36 | $\$ 1,330,000$ | Upgrade Distribution Systems - <br> Central, Northern and Labrador |

(a) Provide the details of the unit capital expenditure costs per customer by region for the period 1996 to 2000 and forecast for 2001 and 2002.
(b) Provide details of the budgeted amount including material and labour costs.
A. (a) The following table shows the capital cost per customer for the period 1996-2002.

| DISTRIBUTION UPGRADING SYSTEM - CENTRAL, NORTHERN \& |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| LABRADOR |  |  |  |  |


| Labrador | 1996 | 152,000 | 9,765 | 15.57 |
| :--- | :---: | :---: | :---: | :---: |
|  | 1997 | 138,000 | 9,994 | 13.81 |
|  | 1998 | 139,000 | 10,241 | 13.57 |
|  | 1999 | 380,000 | 10,404 | 36.52 |
|  | 2000 | 416,000 | 10,547 | 39.44 |
|  | 2001 | 162,000 | 10,597 | 15.29 |
|  | 2002 | 165,000 | 10,689 | 15.44 |

(b) The following table shows the 2002 budget amounts for material and labour.

| DISTRIBUTION UPGRADING SYSTEM <br> CENTRAL, NORTHERN \& LABRADOR |  |  |  |
| :---: | :---: | :---: | :---: |
| 2002 Capital Expenditures |  |  |  |
| Region | Materials | Labour | Total <br> Budget |
| Central | 286,520 | 264,480 | 551,000 |
|  |  |  |  |
| Northern | 319,280 | 294,720 | 614,000 |
| Labrador | 85,800 | 79,200 | 165,000 |
|  |  |  |  |
| Total | 691,600 | 638,400 | $1,330,000$ |

Q. For the budget items identified below, provide the following information:

| Item | Amount | Description |
| :---: | :---: | :--- |
| B-38 | $\$ 669,000$ | Replace Insulators - English Harbour <br> West |
| B-39 | $\$ 317,000$ | Replace Insulators - South Brook <br> Distribution System |

(a) Provide details of the estimated costs of insulator replacements.
(b) Provide an explanation of the difference in the unit costs of insulator replacements in item B-38 with B-39.
A. (a) Specific costs budgeted for purchasing and installing the replacement insulators are as follows:

| English Harbour West |  |
| :--- | ---: |
| Material Supply | $\$ 160,000$ |
| Labour | 265,000 |
| Engineering | 22,000 |
| Project Management | 16,000 |
| Inspection \& Commissioning | 57,000 |
| Corporate O/H, IDC, Esc., Contingency | 148,000 |

## South Brook

Material Supply $\$ 72,000$
Labour 110,000
Engineering 17,000
Project Management 8,000
Inspection \& Commissioning 38,000
Corporate O/H, IDC, Esc., Contingency
71,700

## NP-109 <br> 2001 General Rate Application <br> Page 2 of 2

A. (b) The budget proposal for insulator replacements on the South Brook distribution system actually covers 1420 units. The figure of 850 units quoted in Hydro's 2002 Capital Budget submission is incorrect. This results in per unit costs of insulator replacements, based on material and labour, for English Harbour West and South Brook of \$125.00 and $\$ 128.00$ respectively.

## NP-120

Q. Provide an electronic copy of the cost of service study (Exhibit JAB-1 with formulas included and user documentation).
A. The electronic copy of the cost of service study, Exhibit JAB-1, is provided on the enclosed diskette in the file labeled NP120.COS2002P.zip. The user documentation is also included on the diskette in the file labeled NP-120 COS User Guide.doc.

A hard copy of the user documentation is also attached.

## NEWFOUNDLAND AND LABRADOR HYDRO <br> Cost of Service (COS) Model - User Documentation

The COS Model is comprised of four files as follows:

1. COS.xls (Main model)
2. Load2002Proposed.xls (Load data, along with rural revenue data)
3. Oam2002Proposed.xls (Revenue requirement components)
4. Plant2002Proposed.xls (Plant Original Cost, Net Book Value and Depreciation data)

The COS.xls file contains the calculations relevant to the production of the COS schedules filed in this proceeding. The remaining files contain the requisite input data.

## General Flow of the COS Model

Newfoundland and Labrador Hydro maintains its accounting data by business unit, or cost center. Plant data are, for the most part, identified by system and function. At the point the accounting and plant data enter the COS model they have been compiled and identified, to the extent possible, by appropriate system, function and sub-function. If the system and/or function are not readily identifiable, the cost of service model allocates the appropriate amounts. Load allocation data are provided for each rate class.

Cost of Service amounts are compiled by system, and identified in the model as such. Costs by system are functionalized and classified within the system sheets, into demand, energy, and customer amounts, for the production, transmission and distribution functions.

The revenue requirement, before return on rate base, is then calculated for each system. Return on rate base is comprised of both a return on equity and a return on debt. Rural rate base is excluded from the calculation of the return on equity component. Return on debt is calculated on total rate base. Total revenue requirement, after return on rate base, is then allocated to classes of customers in the following manner:

## System

Island Interconnected
Production Demand
Production Energy
Transmission Demand
Rural Transmission Demand
Distribution Demand
Distribution Customers

## Allocation Basis

Coincident Peak (2CP)
MWh at production
Coincident Peak (1CP)
Coincident Peak (1CP)
Coincident Peak (1CP)
Customers, weighted customers

# NEWFOUNDLAND AND LABRADOR HYDRO <br> Cost of Service (COS) Model - User Documentation 

Other Systems
Production Demand
Production Energy
Transmission Demand
Distribution Demand
Distribution Customers
Coincident Peak (1CP)
MWh at production
Coincident Peak (1CP)
Coincident Peak (1CP)
Customers, weighted customers
Following the allocation of total revenue requirement to rate classes, the total demand, energy and customer costs for each rate class are determined. Unit costs are then calculated as follows:

Demand costs - Demand
Demand costs - Non-demand
Energy costs
Non-demand Demand and Energy
Customer costs
\$ per kW
$\$$ per kWh
\$ per kWh
\$ per kWh
\$ per bill

The rural deficit is allocated to the following customers:
Newfoundland Power
Rural Labrador Interconnected
CFB - Goose Bay
After the Rural deficit allocation, the amounts of the Island Industrial Non-firm Revenue Credit and the CFB-Goose Base Secondary Revenue Credit are calculated and allocated to firm customers within each applicable system.

## COS.xls

## Worksheet Contents

Several of the worksheets, e.g. Revisions, Balance and Index, are designed to check the results of the calculations or aid the user. This document describes those sheets relevant to the production of the filed COS schedules only.

1. Run Options

This worksheet identifies the input files linked to the model (automated by the print macro) and permits the user to set certain run options. Specifically, there are three calculation switches defined on this worksheet:
a) Test Year Switch: This switch provides the capability to run the model on a test year basis, or on a fallout year basis. When the value of the switch changes, the calculations are automated with a macro. The model differences between a test year and a fallout year are as follows:

## NEWFOUNDLAND AND LABRADOR HYDRO <br> Cost of Service (COS) Model - User Documentation

Test Year (Value of 1): Return on equity is an input percentage. The return on equity for Hydro's non-regulated industrial customer (IOCC) is derived from this percentage, and is used to calculate IOCC's revenue requirement.

Fallout Year (Value of 0): Return on equity is a calculated value derived from regulated revenues minus expenses minus return on debt. The portion of regulated revenues related to IOCC is determined through an iteration process which matches the calculated return on equity percent with the return on equity percent used for IOCC's revenue requirement.
b) Rural Island Interconnected Margin Switch: Determines whether or not the return on equity is applicable to the entire Island Interconnected rate base or just a portion thereof.
c) Labrador Interconnected / Isolated System CP/AED Switch: Allows the user to determine whether production demand costs are allocated to customers in all systems other than Island Interconnected by CP or AED.

This worksheet also allows the user to enter a name for the particular COS version being worked on. This name appears as part of the title of each schedule.
2. Summaries: The worksheets in this section of the model present summary COS results.
a) Revenue Requirement: This worksheet contains Schedule 1.1, page 1, Total System Revenue Requirement. It presents the detailed revenue requirement for each of the 5 systems being analyzed as well as the system as a whole.
b) Rate Base: This worksheet contains Schedule 1.1, page 2, Total Rate Base by System.
c) Revenue to Cost: Schedule 1.2, Comparison of Revenue and Allocated Revenue Requirement compares revenue and allocated revenue requirement by rate class for the total system as well as each of the 5 systems being analyzed.

Schedule 1.2.1, Rural Deficit Allocation, details the rural deficit allocation.

## NEWFOUNDLAND AND LABRADOR HYDRO Cost of Service (COS) Model - User Documentation

d) Unit Costs

Schedule 1.3, Unit Demand, Energy and Customer Amounts, presents the unit demand, energy and customer amounts by rate class for each of the 5 systems. The results are presented both before and after the deficit allocation.

Schedule 1.3.1, Total Demand, Energy and Customer Amounts, presents the total demand, energy and customer amounts by rate class for each of the 5 systems. As with Schedule 1.3, the results are presented both before and after the deficit allocation.

Schedule 1.3.2, Demands, Sales and Number of Bills, shows billing demands, sales and number of bills by rate class for each of the 5 systems.

Schedule 1.4 is the Calculation of Firming Up Charge for the Island Interconnected System.

Schedule 1.5 is the Calculation of Transmission Wheeling Charge for the Island Interconnected System.
3. Functional Classification and Allocation Schedules: There is a separate worksheet for each system containing the functionalization, classification and allocation schedules as follows:

Schedule 2.1 - Functional Classification of Revenue Requirement
Schedule 2.2 - Functional Classification of Plant in Service for the Allocation of O\&M Expense
Schedule 2.3 - Functional Classification of Net Book Value
Schedule 2.4 - Functional Classification of Operating \& Maintenance Expense
Schedule 2.5 - Functional Classification of Depreciation Expense
Schedule 2.6 - Functional Classification of Rate Base
Schedule 3.1 - Basis of Allocation to Classes of Service
Schedule 3.2 - Allocation of Functionalized Amounts to Classes of Service
Schedule 3.3 - Allocation of Specifically Assigned Amounts to Classes of Service (Island Interconnected only)

Schedules 2.1, 2.2, 2.4 and 2.6 have a corresponding documentation schedule detailing the basis of the functional classification. The documentation schedules are located to the right of the main schedule.
4. Other Schedules: This group of worksheets contain additional COS calculations.

## NEWFOUNDLAND AND LABRADOR HYDRO <br> Cost of Service (COS) Model - User Documentation

a) Schedule 4.1: This worksheet contains Schedule 4.1, Functionalization and Classification Ratios.
b) Schedule 4.2,4.3,4.4: Three schedules are presented on this worksheet. They are Schedule 4.2, System Load Factors, Schedule 4.3, Holyrood Capacity Factor and Schedule 4.4, Total System Power Purchases.
5. Backup Schedules: The worksheets in this section of the model contain supporting calculations, but the schedules are not part of the published COS.
a) AED: Two schedules, Calculation of the Generation AED Factors, and Calculation of Transmission AED Factors, are presented for each of the five systems. These calculations are retained to support the Run Option to switch production demand allocators for systems other than Island Interconnected.
b) AllocPlt, AllocNBV, AllocDEP and AllocMisc: These worksheets contain additional allocation factors, derived from data on other COS worksheets, to allocate O\&M data.

In addition, the AllocNBV sheet includes the calculation of allocated interest and margin.
c) Average Costs: Average costs per kWh are shown for the total system as well as for each of the 5 systems.
d) Coverage: This worksheet calculates regulated gross interest coverage.
e) Customers: This worksheet contains calculations for weighted customers.
f) DistnDetails: This worksheet calculates the functionalization ratios for distribution plant by system.
g) O\&M Summary: The final allocations of the O\&M data are made on this worksheet prior to inclusion in the COS system schedules, e.g. IsIIntCos.
h) SPLT Details, SNBV Details and SDEP Details: These worksheets are used to functionalize some items of the plant data prior to use on the COS sheets, e.g. IsIIntCos.
i) SpecAssFuel: This worksheet details the amount of specifically assigned fuel for Island Interconnected. For the test year, this schedule is not used.
j) SystemizedPlant: Two schedules are presented containing supplemental plant allocations for meters and computer software.

NEWFOUNDLAND AND LABRADOR HYDRO
Cost of Service (COS) Model - User Documentation

## Printing the COS Schedules

A print routine is included on the COS.xls file. The schedules may be printed from any location in the workbook by pressing CTRL-T. A print menu allows the user to choose from the following options:
(1) Print the full cost of service, or
(2) Print one or more of the following:
(i) Summaries
(ii) Island Interconnected
(iii) Island Isolated
(iv) Labrador Isolated
(v) L’Anse au Loup
(vi) Labrador Interconnected
(vii) Other
(viii) Backup Schedules

Each printed sheet includes the date and number of pages. An optional run label can be entered by the user and appears in the lower right-hand corner of each output sheet.
Q. (a) Provide the capacity factors for each year for the time period 1992 to 2000 and forecasts for 2001 and 2002 on each of Hydro's hydraulic and thermal plants (including gas turbines and diesels) on the Island (in the format of Exhibit JAB-1, page 93 of 94, Schedule 4.3).
(b) Provide the island interconnected system capacity factor for each of these years.
A. (a) The net capacity factors for all Island Interconnected System generating plants are provided on the attached sheets. Data from a plant for the year it was connected to the system was excluded from the total.
(b) The Island Interconnected System capacity factors are in the following table. Data from a plant for the year it was connected to the system was excluded from the total.

| Island Interconnected System NET |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | Net Production (kWh) | Net Capacity (MW) | Net Production Hours | Net Capacity Factor |
| 1992 | 5,926,373,147 | 1,464 | 8,784 | 46.09\% |
| 1993 | 5,998,219,216 | 1,466 | 8,760 | 46.71\% |
| 1994 | 5,821,774,061 | 1,470 | 8,760 | 45.21\% |
| 1995 | 5,926,288,933 | 1,474 | 8,760 | 45.90\% |
| 1996 | 5,977,960,323 | 1,476 | 8,784 | 46.11\% |
| 1997 | 6,160,353,193 | 1,491 | 8,760 | 47.17\% |
| 1998 | 5,525,111,462 | 1,491 | 8,760 | 42.30\% |
| 1999 | 5,721,707,245 | 1,491 | 8,760 | 43.81\% |
| 2000 | 5,985,452,087 | 1,486 | 8,784 | 45.85\% |
| 2001 Forecast | 6,246,218,812 | 1,491 | 8,760 | 47.84\% |
| 2002 Forecast | 6,434,088,000 | 1,486 | 8,760 | 49.43\% |
| Average | 5,974,867,862 | 1,480 | 8,767 | 46.04\% |

# 2001 General Rate Application 

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## Newfoundland \& Labrador Hydro Capacity Factors

Line

| 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| Year | Net Production (kWh) | Net Capacity (MW) | Net Production Hours | Net Capacity Factor |
| Bay Despoir NET |  |  |  |  |
| 1992 | 2,613,023,747 | 580 | 8,784 | 51.29\% |
| 1993 | 2,814,689,877 | 582 | 8,760 | 55.21\% |
| 1994 | 3,282,273,338 | 586 | 8,760 | 63.94\% |
| 1995 | 2,587,721,679 | 590 | 8,760 | 50.07\% |
| 1996 | 2,785,871,835 | 592 | 8,784 | 53.57\% |
| 1997 | 2,845,782,777 | 592 | 8,760 | 54.88\% |
| 1998 | 2,609,236,542 | 592 | 8,760 | 50.31\% |
| 1999 | 3,088,238,874 | 592 | 8,760 | 59.55\% |
| 2000 | 3,115,048,699 | 592 | 8,784 | 59.90\% |
| 2001 Forecast | 2,598,000,000 | 592 | 8,760 | 50.10\% |
| 2002 Forecast | 2,598,000,000 | 592 | 8,760 | 50.10\% |
| Average | 2,812,535,215 | 589 | 8,767 | 54.44\% |
| Hinds Lake NET |  |  |  |  |
| 1992 | 308,069,400 | 75 | 8,784 | 46.76\% |
| 1993 | 354,162,600 | 75 | 8,760 | 53.91\% |
| 1994 | 459,039,460 | 75 | 8,760 | 69.87\% |
| 1995 | 402,552,500 | 75 | 8,760 | 61.27\% |
| 1996 | 352,272,400 | 75 | 8,784 | 53.47\% |
| 1997 | 407,475,600 | 75 | 8,760 | 62.02\% |
| 1998 | 408,690,300 | 75 | 8,760 | 62.21\% |
| 1999 | 345,717,400 | 75 | 8,760 | 52.62\% |
| 2000 | 387,975,200 | 75 | 8,784 | 58.89\% |
| 2001 Forecast | 340,000,000 | 75 | 8,760 | 51.75\% |
| 2002 Forecast | 340,000,000 | 75 | 8,760 | 51.75\% |
| Average | 373,268,624 | 75 | 8,767 | 56.77\% |
| Upper Salmon NET |  |  |  |  |
| 1992 | 558,649,600 | 84 | 8,784 | 75.71\% |
| 1993 | 551,711,100 | 84 | 8,760 | 74.98\% |
| 1994 | 658,440,200 | 84 | 8,760 | 89.48\% |
| 1995 | 552,100,600 | 84 | 8,760 | 75.03\% |
| 1996 | 597,657,300 | 84 | 8,784 | 81.00\% |
| 1997 | 599,077,900 | 84 | 8,760 | 81.41\% |
| 1998 | 553,898,400 | 84 | 8,760 | 75.27\% |
| 1999 | 649,086,200 | 84 | 8,760 | 88.21\% |
| 2000 | 636,938,500 | 84 | 8,784 | 86.32\% |
| 2001 Forecast | 552,000,000 | 84 | 8,760 | 75.02\% |
| 2002 Forecast | 552,000,000 | 84 | 8,760 | 75.02\% |
| Average | 587,414,527 | 84 | 8,767 | 79.77\% |

## Newfoundland \& Labrador Hydro Capacity Factors

## Cat Arm NET

[^0]



#### Abstract





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## Paradise River NET

| 1992 | $30,637,520$ |
| :---: | :---: |
| 1993 | $45,086,890$ |
| 1994 | $34,388,570$ |
| 1995 | $35,452,810$ |
| 1996 | $36,885,220$ |
| 1997 | $34,758,580$ |
| 1998 | $32,005,510$ |
| 1999 | $37,971,130$ |
| 2000 | $36,441,220$ |
| Forecast | $39,370,000$ |
| Forecast | $39,370,000$ |
| Average | $36,578,859$ |


| 127 | 8,784 | $63.15 \%$ |
| :--- | :--- | :--- |
| 127 | 8,760 | $59.94 \%$ |
| 127 | 8,760 | $54.19 \%$ |
| 127 | 8,760 | $72.67 \%$ |
| 127 | 8,784 | $71.10 \%$ |
| 127 | 8,760 | $66.06 \%$ |
| 127 | 8,760 | $58.46 \%$ |
| 127 | 8,760 | $60.66 \%$ |
| 127 | 8,784 | $75.01 \%$ |
| 127 | 8,760 | $66.07 \%$ |
| 127 | 8,760 | $66.07 \%$ |
| 127 | 8,767 | $64.86 \%$ |


| 8,784 | $43.60 \%$ |
| :--- | :--- |
| 8,760 | $64.34 \%$ |
| 8,760 | $49.07 \%$ |
| 8,760 | $50.59 \%$ |
| 8,784 | $52.49 \%$ |
| 8,760 | $49.60 \%$ |
| 8,760 | $45.67 \%$ |
| 8,760 | $54.18 \%$ |
| 8,784 | $51.86 \%$ |
| 8,760 | $56.18 \%$ |
| 8,760 | $56.18 \%$ |
| 8,767 | $52.16 \%$ |

## Snook's Arm

| 1992 | $3,865,320$ |
| ---: | ---: |
| 1993 | $3,571,290$ |
| 1994 | $4,016,700$ |
| 1995 | $3,567,690$ |
| 1996 | $4,394,160$ |
| 1997 | $3,868,290$ |
| 1998 | $4,033,170$ |
| 1999 | $2,981,640$ |
| 2000 | $1,661,760$ |
| 2001 Forecast | $3,675,000$ |
| 2002 Forecast | $3,675,000$ |
| Average | $3,573,638$ |


| 0.56 | 8,784 | $78.58 \%$ |
| :--- | :--- | :--- |
| 0.56 | 8,760 | $72.80 \%$ |
| 0.56 | 8,760 | $81.88 \%$ |
| 0.56 | 8,760 | $72.73 \%$ |
| 0.56 | 8,784 | $89.33 \%$ |
| 0.56 | 8,760 | $78.85 \%$ |
| 0.56 | 8,760 | $82.22 \%$ |
| 0.56 | 8,760 | $60.78 \%$ |
| 0.56 | 8,784 | $33.78 \%$ |
| 0.56 | 8,760 | $74.91 \%$ |
| 0.56 | 8,760 | $74.91 \%$ |
| 0.56 | 8,767 | $72.79 \%$ |

## Newfoundland \& Labrador Hydro

 Capacity Factors| Newfoundland \& Labrador Hydro Capacity Factors |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Venam's Bight |  |  |  |  |
| 1992 | 2,827,140 | 0.36 | 8,784 | 89.40\% |
| 1993 | 2,921,520 | 0.36 | 8,760 | 92.64\% |
| 1994 | 2,564,340 | 0.36 | 8,760 | 81.31\% |
| 1995 | 2,571,420 | 0.36 | 8,760 | 81.54\% |
| 1996 | 2,921,400 | 0.36 | 8,784 | 92.38\% |
| 1997 | 2,816,580 | 0.36 | 8,760 | 89.31\% |
| 1998 | 2,900,520 | 0.36 | 8,760 | 91.97\% |
| 1999 | 2,592,900 | 0.36 | 8,760 | 82.22\% |
| 2000 | 1,151,040 | 0.36 | 8,784 | 36.40\% |
| 2001 Forecast | 2,575,000 | 0.36 | 8,760 | 81.65\% |
| 2002 Forecast | 2,575,000 | 0.36 | 8,760 | 81.65\% |
| Average | 2,583,351 | 0.36 | 8,767 | 81.86\% |
| Roddickton Mini Hydro NET |  |  |  |  |
| 1992 | 0 |  |  |  |
| 1993 | 0 |  |  |  |
| 1994 | 0 |  |  |  |
| 1995 | 0 |  |  |  |
| 1996 | 377,490 | 0.40 | 2,928 | 32.23\% |
| 1997 | 804,048 | 0.40 | 8,760 | 22.95\% |
| 1998 | 1,348,514 | 0.40 | 8,760 | 38.48\% |
| 1999 | 1,111,690 | 0.40 | 8,760 | 31.73\% |
| 2000 | 731,940 | 0.40 | 8,784 | 20.83\% |
| 2001 Forecast | 1,050,000 | 0.40 | 8,760 | 29.97\% |
| 2002 Forecast | 1,050,000 | 0.40 | 8,760 | 29.97\% |
| Average | 1,016,032 | 0.40 | 8,764 | 28.98\% |
| THERMAL Holyrood NET |  |  |  |  |
| 1992 | 1,706,212,840 | 466 | 8,784 | 41.68\% |
| 1993 | 1,558,883,340 | 466 | 8,760 | 38.19\% |
| 1994 | 776,894,400 | 466 | 8,760 | 19.03\% |
| 1995 | 1,533,078,080 | 466 | 8,760 | 37.56\% |
| 1996 | 1,403,596,120 | 466 | 8,784 | 34.29\% |
| 1997 | 1,531,300,920 | 466 | 8,760 | 37.51\% |
| 1998 | 1,263,264,060 | 466 | 8,760 | 30.95\% |
| 1999 | 919,801,520 | 466 | 8,760 | 22.53\% |
| 2000 | 970,283,280 | 466 | 8,784 | 23.70\% |
| 2001 Forecast | 1,971,340,000 | 466 | 8,760 | 48.29\% |
| 2002 Forecast | 2,157,880,000 | 466 | 8,760 | 52.86\% |
| Average | 1,435,684,960 | 466.00 | 8,767 | 35.14\% |

## Newfoundland \& Labrador Hydro Capacity Factors

Hardwoods GAS TURBINE NET

| 1992 | $(1,353,360)$ |
| ---: | ---: |
| 1993 | $(347,061)$ |
| 1994 | 920,893 |
| 1995 | 245,812 |
| 1996 | 286,028 |
| 1997 | $(44,408)$ |
| 1998 | $(204,270)$ |
| 1999 | $(214,544)$ |
| 2000 | $(662,432)$ |
| 2001 Forecast | $1,590,000$ |
| 2002 Forecast | $2,240,000$ |
| Average | 223,333 |


| 54 | 8,784 | $-0.29 \%$ |
| ---: | ---: | ---: |
| 54 | 8,760 | $-0.07 \%$ |
| 54 | 8,760 | $0.19 \%$ |
| 54 | 8,760 | $0.05 \%$ |
| 54 | 8,784 | $0.06 \%$ |
| 54 | 8,760 | $-0.01 \%$ |
| 54 | 8,760 | $-0.04 \%$ |
| 54 | 8,760 | $-0.05 \%$ |
| 54 | 8,784 | $-0.14 \%$ |
| 54 | 8,760 | $0.34 \%$ |
| 54 | 8,760 | $0.47 \%$ |
| 54.00 | 8,767 | $0.05 \%$ |

## Stephenville GAS TURBINE Net

| 1992 | $(476,460)$ |
| ---: | :---: |
| 1993 | 327,360 |
| 1994 | $(211,440)$ |
| 1995 | $(177,058)$ |
| 1996 | 24,060 |
| 1997 | $(510,480)$ |
| 1998 | $(598,860)$ |
| 1999 | $(253,200)$ |
| 2000 | $(553,460)$ |
| 2001 Forecast | $1,200,000$ |
| 2002 Forecast | $1,200,000$ |
| Average | $(2,685)$ |


| 54 | 8,784 | $-0.10 \%$ |
| ---: | ---: | ---: |
| 54 | 8,760 | $0.07 \%$ |
| 54 | 8,760 | $-0.04 \%$ |
| 54 | 8,760 | $-0.04 \%$ |
| 54 | 8,784 | $0.01 \%$ |
| 54 | 8,760 | $-0.11 \%$ |
| 54 | 8,760 | $-0.13 \%$ |
| 54 | 8,760 | $-0.05 \%$ |
| 54 | 8,784 | $-0.12 \%$ |
| 54 | 8,760 | $0.25 \%$ |
| 54 | 8,760 | $0.25 \%$ |
| 54.00 | 8,767 | $0.00 \%$ |

Holyrood GAS TURBINE

| 1992 | 215,000 |
| ---: | ---: |
| 1993 | 156,100 |
| 1994 | 471,000 |
| 1995 | 124,000 |
| 1996 | 255,000 |
| 1997 | 189,000 |
| 1998 | 248,000 |
| 1999 | 296,000 |
| 2000 | 124,000 |
| 2001 Forecast | 440,000 |
| 2002 Forecast | 750,000 |
| Average | 297,100 |


| 10 | 8,784 | $0.24 \%$ |
| ---: | ---: | ---: |
| 10 | 8,760 | $0.18 \%$ |
| 10 | 8,760 | $0.54 \%$ |
| 10 | 8,760 | $0.14 \%$ |
| 10 | 8,784 | $0.29 \%$ |
| 10 | 8,760 | $0.22 \%$ |
| 10 | 8,760 | $0.28 \%$ |
| 10 | 8,760 | $0.34 \%$ |
| 10 | 8,784 | $0.14 \%$ |
| 10 | 8,760 | $0.50 \%$ |
| 10 | 8,760 | $0.86 \%$ |
| 10.00 | 8,767 | $0.34 \%$ |

## Newfoundland \& Labrador Hydro Capacity Factors

St. Anthony Diesel NET
St. Anthony Diesel NET

| 1992 | 0 |
| ---: | ---: |
| 1993 | 0 |
| 1994 | 0 |
| 1995 | 0 |
| 1996 | 969,500 |
| 1997 | $(202,202)$ |
| 1998 | $(11,200)$ |
| 1999 | $(180,000)$ |
| 2000 | $(227,600)$ |
| 2001 Forecast | 204,000 |
| 2002 Forecast | 204,000 |
| Average | $(35,500)$ |

8.00
8.00
8.00
8.00
8.00
8.00
8.00
8.00

| 2,928 | $4.14 \%$ |
| ---: | ---: |
| 8,760 | $-0.29 \%$ |
| 8,760 | $-0.02 \%$ |
| 8,760 | $-0.26 \%$ |
| 8,784 | $-0.32 \%$ |
| 8,760 | $0.29 \%$ |
| 8,760 | $0.29 \%$ |
| 8,764 | $-0.05 \%$ |

## Hawkes Bay Diesel NET

| 1992 | 192,000 |
| ---: | :---: |
| 1993 | 168,000 |
| 1994 | 115,200 |
| 1995 | 600,000 |
| 1996 | 600,000 |
| 1997 | 129,600 |
| 1998 | 115,888 |
| 1999 | 170,056 |
| 2000 | $(148,860)$ |
| 2001 Forecast | 120,000 |
| 2002 Forecast | 120,000 |
| Average | 198,353 |


| 5 | 8,784 | $0.44 \%$ |
| ---: | ---: | ---: |
| 5 | 8,760 | $0.38 \%$ |
| 5 | 8,760 | $0.26 \%$ |
| 5 | 8,760 | $1.37 \%$ |
| 5 | 8,784 | $1.37 \%$ |
| 5 | 8,760 | $0.30 \%$ |
| 5 | 8,760 | $0.26 \%$ |
| 5 | 8,760 | $0.39 \%$ |
| 5 | 8,784 | $-0.34 \%$ |
| 5 | 8,760 | $0.27 \%$ |
| 5 | 8,760 | $0.27 \%$ |
| 5.00 | 8,767 | $0.45 \%$ |

Roddickton Diesel NET

| 1992 | 0 |
| ---: | ---: |
| 1993 | 0 |
| 1994 | 0 |
| 1995 | 0 |
| 1996 | 129,780 |
| 1997 | 429,020 |
| 1998 | 31,840 |
| 1999 | $(56,040)$ |
| 2000 | $(77,600)$ |
| 2001 Forecast | 24,000 |
| 2002 Forecast | 24,000 |
| Average | 62,537 |

2.00
2.00
2.00
2.00
1.70
1.70
1.70
1.85

| 2,928 | $2.22 \%$ |
| :--- | ---: |
| 8,760 | $2.45 \%$ |
| 8,760 | $0.18 \%$ |
| 8,760 | $-0.32 \%$ |
| 8,784 | $-0.52 \%$ |
| 8,760 | $0.16 \%$ |
| 8,760 | $0.16 \%$ |
| 8,764 | $0.39 \%$ |

## Newfoundland \& Labrador Hydro Capacity Factors

## Roddickton Woodchip NET

| 1992 | 0 |
| ---: | ---: |
| 1993 | 0 |
| 1994 | 0 |
| 1995 | 0 |
| 1996 | 631,860 |
| 1997 | $(437,232)$ |
| 1998 | $(259,852)$ |
| 1999 | $(410,481)$ |
| 2000 | $(369,188)$ |


| 4.60 | 2,928 | $4.69 \%$ |
| :--- | ---: | ---: |
| 4.60 | 8,760 | $-1.09 \%$ |
| 4.60 | 8,760 | $-0.64 \%$ |
| 4.60 | 8,760 | $-1.02 \%$ |
|  |  |  |
| 4.60 | 8,760 | $-0.92 \%$ |

## Island Interconnected NET

| 1992 | $5,926,373,147$ | 1,464 |
| ---: | ---: | ---: |
| 1993 | $5,998,219,216$ | 1,466 |
| 1994 | $5,821,774,061$ | 1,470 |
| 1995 | $5,926,288,933$ | 1,474 |
| 1996 | $5,977,960,323$ | 1,476 |
| 1997 | $6,160,353,193$ | 1,491 |
| 1998 | $5,525,111,462$ | 1,491 |
| 1999 | $5,721,707,245$ | 1,491 |
| 2000 | $5,985,452,087$ | 1,486 |
| 2001 Forecast | $6,246,218,812$ | 1,486 |
| 2002 Forecast | $6,434,088,000$ | 1,486 |
| Average | $5,974,867,862$ | 1,480 |


| 8,784 | $46.09 \%$ |
| :--- | :--- |
| 8,760 | $46.71 \%$ |
| 8,760 | $45.21 \%$ |
| 8,760 | $45.90 \%$ |
| 8,784 | $46.11 \%$ |
| 8,760 | $47.17 \%$ |
| 8,760 | $42.30 \%$ |
| 8,760 | $43.81 \%$ |
| 8,784 | $45.85 \%$ |
| 8,760 | $47.98 \%$ |
| 8,760 | $49.43 \%$ |
| 8,767 | $46.05 \%$ |

4 A. See attached reports.

4 A. See table below.
Reconcilation of Newfoundland Power Demand Forecast
Versus 2CP (KW)

|  | January | December | 2CP - Total |
| :---: | :---: | :---: | :---: |
| NP as per <br> JAB-1, page <br> 38 | 989,280 | 989,288 | $1,978,568$ |
| Demand as <br> per Forecast | $1,026,791$ | $1,026,791$ |  |
| Adjustment to <br> include load <br> supplied by <br> NP | 46,960 | 46,960 | $(120,500)$ |
| Generation <br> Credit | $(120,500)$ | 36,037 |  |
| Allocated <br> Losses to <br> Transmission <br> side of <br> Generation | 36,029 | 989,280 | $1,978,568$ |
| Generation <br> CP | 98,288 |  |  |

## NP-127 2001 General Rate Application <br> Page 1 of 2

1 Q.

3
4 A. See attached.

NP-127

| Specifically Assigned Charges | Total | NF Power | Industrial Customers | Basis for amount | Schedule Reference |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Transmission Lines | 5,701 | - | 5,701 | Transmission Lines O\&M total expenses allocated based on plant | Exhibit JAB-1, Page 33 |
| Transmission Terminal Station | 211168 | 123,365 | 87,803 | Terminal Station O\&M total expenses allocated based on plant | Exhibit JAB-1, Page 33 |
|  |  |  |  | Overhead allocations based on plant and total direct |  |
| Administrative \& General | 169,725 | 98,281 | 71,444 | O\&M expenses | Exhibit JAB-1, Page 33 |
| Depreciation Transmission Lines | 42,698 | 41,510 | 1,188 | Depreciation on Specifically assigned plant | Exhibit JAB-1, Page 35 |
| Depreciation Transmission Terminal |  |  |  |  |  |
| Stations | 333,789 | 264,588 | 69,201 | Depreciation on Specifically assigned plant General Plant depreciation allocation based on | Exhibit JAB-1, Page 35 |
| Depreciation General Plant | 171,828 | 139,703 | 32,125 | specifically assigned plant | Exhibit JAB-1, Page 35 |
| Rental Income | (130) | (76) | (54) | Expense Credit allocation based on total plant Expense Credit allocation based on total O\&M | Exhibit JAB-1, Page 28 |
| Other Expense Credits | $(2,165)$ | $(1,254)$ | (911) | expenses | Exhibit JAB-1, Page 28 |
| Gain or Loss on Disposal of Fixed Assets | 5,803 | 4,548 | 1,255 | Expense allocation based on total plant | Exhibit JAB-1, Page 28 |
| Return on Debt | 656,397 | 514,402 | 141,995 | Expense allocation based on total plant | Exhibit JAB-1, Page 36 |
| Return on Equity | 43,319 | 33,948 | 9,371 | Expense allocation based on total plant | Exhibit JAB-1, Page 36 |
|  |  | 1,219,015 | 419,118 |  |  |


[^0]:    

