IN THE MATTER OF THE

2003 GENERAL RATE APPLICATION

FILED BY

NEWFOUNDLAND AND LABRADOR HYDRO

DECISION AND ORDER

OF THE BOARD

ORDER No. P.U. 14 (2004)

BEFORE:

Mr. Robert Noseworthy
Chair and Chief Executive Officer

Ms. Darlene Whalen, P.Eng.
Vice-Chair

Mr. G. Fred Saunders
Commissioner

P.U. 14 (2004)

IN THE MATTER OF the *Electrical Power Control Act* R.S.N. 1994, Chapter E-5.1 (the "*EPCA*") and the matter of the *Public Utilities Act* R.S.N. 1990, Chapter P-47 (the *"Act"*);

AND IN THE MATTER OF an application by Newfoundland and Labrador Hydro for approval of, *inter alia*, rates to be charged its customers (the "*Application*").

BEFORE:

Robert Noseworthy
Chair and Chief Executive Officer

Darlene Whalen, P.Eng.
Vice-Chair

G. Fred Saunders
Commissioner

TABLE OF CONTENTS

III. REVENUE REQUIREMENT

IV. RATE STABILIZATION PLAN

V. RATE BASE

VI. COST OF SERVICE

VII. LABRADOR INTERCONNECTED SYSTEM

APPENDICES (SEE SEPARATE DOCUMENT)

PART ONE. PROCEDURAL MATTERS AND BACKGROUND

I. APPLICATION AND HEARING

1. The Application

Newfoundland and Labrador Hydro (NLH) filed an Application (Appendix A) with the Board of Commissioners of Public Utilities (the "Board") on May 21, 2003 for an Order of the Board approving, among other things, the rates to be charged, as of January 1, 2004, for the supply of power and energy to its Customers.

On August 12, 2003 NLH filed an amended Application (Appendix B) to reflect:

1) certain directions by Government pursuant to Section 5.1 of the *EPCA*, 1994;
2) a reduction in the requested rate of return on equity for rate setting purposes to 9.75%; and
3) Board Order No. P. U. 23(2003), approving revised rates for Newfoundland Power (NP) customers, which flow through to NLH rural customers.

The Pre-filed Evidence, Exhibits and Studies filed as part of the original application were also updated and re-filed with the amended Application.

In its Application NLH is proposing the following:

(1) "that the rate charged NP be increased, no later than January 1, 2004, to 54.45 mills per kWh;
(2) that the rate charged NP as of January 1, 2004, for firming up secondary energy purchased from Corner Brook Pulp and Paper Limited and re-sold to NP as firm energy be decreased to 6.41 mills per kWh;
(3) that the rates charged to Industrial Customers for firm service be increased, no later than January 1, 2004, to a demand charge of $6.49 per kW per month, an energy charge of 27.55 mills per kWh and the relevant annual specifically assigned charges;
(4) that the rates charged to Industrial Customers for non-firm service be, as of January 1, 2004, $1.50 per kW per month and a variable energy charge based on the calculation on the Rates Schedules attached to the Application;
(5) that the rate for wheeling energy for Abitibi-Consolidated Company of Canada be decreased to 4.49 mills per kWh as of January 1, 2004;
(6) that the existing policy be continued of allowing NLH, as NP changes its rates, to automatically adjust the rates which it charges its Island Interconnected Rural Customers, its customers served from the L'Anse au Loup System, and its non-Government Isolated Domestic Rural Customers for the first 700 kWh per month of consumption, so that rates are the same as the rates charged by NP to its customers;
(7) that the existing policy be continued of allowing NLH to change the rates charged for consumption over 700 kWh per month of electricity sold to non-Government Isolated Domestic Rural Customers (the "lifeline block") by the average rate of change (i.e. increase or decrease) granted to NP from time to time;

(8) *that the policy, outlined in Order No. P .U. 7(2002-2003) of charging rates based on full cost recovery for Government departments, excluding hospitals and schools in Isolated Rural Systems, be continued;*

(9) *that the lifeline block be phased out for Isolated General Service Customers and that a demand energy rate structure be implemented for these customers as directed by Order No. P. U. 7(2002-2003) and phased in over a five-year period;*

(10) *that the rates for Labrador Interconnected Customers be based on a uniform Rate Structure as approved in Order No. P. U. 7(2002-2003) and phased in over a five-year period;*

(11) *that the following financial targets be approved by the Board as appropriate for NLH:*

Return on Equity (ROE)	*9.75%*
Debt to Capital Structure	*80%*
Return on Rate Base	*8.15%*

(12) *that the estimated 2004 average Rate Base be $1,485,468,000;*

(13) *that the just and reasonable Rate of Return on the estimated average Rate Base for 2004 be 8.15%; and*

(14) *certain minor amendments to the Rates, Rules and Regulations which govern the provision of service to Rural Customers be made to eliminate the statement preparation fee; to reduce the fee applicable for customer name changes from $14 to $8; and to extend the application of the reconnection fee to circumstances where customers request reconnection of service following a request for a landlord to disconnect."*

On October 31, 2003 NLH updated the data filed with its Application to reflect more current information. The revised information filed included actual expenses to August 31, 2003, and the most recent forecast for relevant matters such as No. 6 fuel price, load, interest rate and exchange rates.

Based on NLH's updated filing the base rate increase to NP as a result of the Application was projected to be 12%, resulting in a projected increase to the end consumer of approximately 6.5% as of January 1, 2004. The increase in base rates for Island Industrial Customers was forecast to be 12.2% as of January 1, 2004.

2. Notice and Pre-Hearing Conference

Notice of the Application and Pre-hearing Conference was published in newspapers throughout the Province beginning on June 9, 2003. The Pre-hearing Conference was held on July 18, 2003. The Board issued Procedural Order No. P. U. 24(2003) on July 23, 2003 which identified registered intervenors, set procedural rules for the conduct of the hearing, and set the schedule for the filing and service of documents, the motions days and the hearing. (Appendix D)

Registered intervenors for the proceeding were:

1) Government appointed Consumer Advocate (CA), Mr. Dennis Browne, Q.C.; and Counsel, Stephen Fitzgerald, LL.B.
2) Newfoundland Power Inc. (NP), represented by Mr. Ian Kelly, Q.C. and Mr. Brock Myles, LL.B.

3) NLH's Industrial Customers (IC), namely Corner Brook Pulp and Paper Limited, Abitibi Consolidated Company of Canada – Stephenville and Grand Falls Divisions, North Atlantic Refining Limited and Voisey's Bay Nickel Company Limited; represented by Mr. Joseph Hutchings, Q.C. and Mr. Colm Seviour, LL.B.
4) the Towns of Labrador City and Wabush, represented by Mr. Edward Hearn, Q.C.

NLH was represented throughout the hearing by Ms. Maureen P. Greene, Q.C., and Mr. Geoffrey P. Young, LL.B. The Board notes that Counsel for the Towns of Labrador City and Wabush was not present for every day of the hearing. As stated by their Counsel in final submissions, the interest of the Towns of Labrador City and Wabush was a particular one that did not require attendance at the hearing when issues peripheral to their interests were being addressed.

The Board was assisted at the hearing by Mr. Mark Kennedy, LL.B., who acted as Board Hearing Counsel; Ms. Dwanda Newman, LL.B., Board Counsel; Ms. Cheryl Blundon, Board Secretary; and Ms. Barbara Thistle, Assistant Board Secretary.

3. Motions

On June 25, 2003 the Town of Labrador City filed a notice of intervention and submission requesting, among other things, that it be granted its costs of intervention. NP and NLH filed replies to this motion. At the Pre-hearing Conference the Board heard representations on the motion. The Board subsequently issued Order No. P. U. 25(2003) denying the motion and ordering that the issue of costs would be addressed at the conclusion of the proceeding if a motion for costs was made at that time pursuant to Section 90(1) of the *Act*. (Appendix F)

On September 5, 2003 the IC filed a motion with the Board seeking an order that the expert reports proposed to be filed by Board Hearing Counsel be excluded from evidence substantially on the basis that the filing of such reports raised an apprehension of bias. NLH and NP filed written responses to the motion. The Board heard from the parties on the motion on September 16, 2003 and subsequently issued Order No. P. U. 32(2003) denying the motion. (Appendix G)

The Board was scheduled to convene in Labrador City beginning on November 3, 2003 to hear evidence and public presentations relating to NLH's proposals for the Labrador Interconnected System. On October 29, 2003 the Board received a motion from the Towns of Labrador City and Wabush requesting that the hearings be rescheduled to a later date to allow time to review revised evidence NLH was proposing to file on October 31, 2003. On October 30, 2003 the Board issued Order No. P. U. 34(2003) granting the motion to postpone the Labrador City proceedings. (Appendix I)

4. The Hearing

The hearing commenced on October 6, 2003 and continued over a 10-week period for 35 hearing days. Written submissions were submitted by NLH, the registered intervenors and Board Hearing Counsel on January 12, 2004. Final oral submissions were presented on January 16, 2004. During the hearing the following witnesses testified:

<u>Witnesses called by NLH</u>:

Mr. William E. Wells	President and Chief Executive Officer, NLH
Mr. John C. Roberts, CA	Vice-President, Finance and Chief Financial Officer, NLH
Mr. James R. Haynes, P. Eng.	Vice-President, Production, NLH
Mr. Fred H. Martin, P. Eng.	Vice-President, Transmission and Rural Operations, NLH
Mr. Sam D. Banfield, P. Eng.	Director, Customer Service, NLH
Mr. Robert D. Greneman, P.E.	Associate Director, Stone &Webster Management Consultants, Inc., New York, NY
Ms. Kathleen C. McShane	Senior Vice-President and Senior Consultant, Foster Associates, Inc., Bethesda, Maryland
Ms. Susan Richter, P.Eng.	Senior Hydrotechnical Engineer, SGE Acres Limited St. John's, NL

<u>Witnesses called by the Consumer Advocate:</u>

Mr. Douglas Bowman	Executive Consultant, KEMA Consulting, Fairfax, Virginia
Dr. Basil Kalymon	Professor of Finance, Richard Ivey School of Business, University of Western Ontario, London, ON

<u>Witnesses called by NP:</u>

Mr. Larry Brockman	President, Brockman Consulting, Atlanta, Georgia
Mr. Barry Perry, CA	Vice-President and Chief Financial Officer, NP
Mr. Lorne Henderson, P. Eng.	Director, Rates & Operations, NP

<u>Witnesses called by the IC:</u>

Mr. Cameron Osler	President and Senior Consultant, InterGroup Consultants, Ltd., Winnipeg, MB
Mr. Patrick Bowman	Consultant, InterGroup Consultants, Ltd., Winnipeg, MB
Mr. Mel Dean	Continuous Improvement Manager, Abitibi-Consolidated Company of Canada Stephenville Mill, Stephenville, NL
Mr. Jean Francois Guillot	General Manager, Abitibi-Consolidated Company of Canada, Stephenville Mill, Stephenville, NL

Witness called by the Towns of Labrador City and Wabush:

Mr. Mark Drazen	Consultant, Drazen Consulting Group, Calgary, AB

Witnesses called by Board Hearing Counsel:

Ms. Gail Tabone	Vice-President, EES Consulting, Kirkland, Washington
Mr. Nigel Chymko	Vice-President, EES Consulting, Calgary, AB
Dr. Leonard Waverman	Special Advisor, National Economic Research Associates (NERA), London, UK
Mr. William R. Brushett, FCA	Partner, Grant Thornton LLP, St. John's, NL (Board's Financial Consultant)

Public participation days were held in Stephenville, Corner Brook, Labrador City, Happy Valley-Goose Bay and St. John's. During this phase of the hearing interested persons and organizations were offered the opportunity to present their views on issues arising from the Application.

The Board heard from the following persons during the public participation days:

In Stephenville on November 24, 2003:

Mr. Mike Tobin, Counsellor, Town of Stephenville and Chairperson, Stephenville Economic Development Committee, Stephenville, NL
Mr. Cator Best, Deputy Mayor, Town of Kippens, Kippens, NL
Mr. Paul Gallant, Bay St. George Chamber of Commerce, Bay St. George, NL
Mr. John MacPherson, Executive Director, Long Range Regional Economic Development Board, Stephenville, NL
Mr. Jim Hickman, President, Local Union 1093, Communications, Energy and Paper Workers Union of Canada, Abitibi Consolidated Mill, Stephenville, NL
Mr. Russell Tulk, President, Santa Maria Club, Knights of Columbus, Stephenville, NL

In Corner Brook on November 25, 2003:

Ms. Priscilla Boutcher, Mayor, City of Corner Brook, Corner Brook, NL
Mr. Terry Locke, Chairman, Great Humber Joint Council, Corner Brook, NL
Mr. Perry Bingle, Executive Director, Humber Economic Development Board, Corner Brook, NL
Mr. Mark Baldwin, President, Greater Corner Brook Board of Trade, Corner Brook, NL
Mr. Jeff Burt, Chairperson, Corner Brook Downtown Business Association, Corner Brook, NL
Mr. Brendan Mitchell, Employee, Corner Brook Pulp and Paper Limited, Corner Brook, NL
Mr. Keith Cormier, Chairperson, Corner Brook Economic Development Corporation, Corner Brook, NL

Ms. Joy Blackwood, Researcher and Recording Secretary,
Corner Brook Port Corporation, Corner Brook, NL
Mr. Matt Organ, Branch Manager, Kinecor Inc., Corner Brook, NL
Mr. Greg Barnes, Area Manager, Clarke Transport, Corner Brook, NL
Mr. Michael Lacey, Employee, Corner Brook Pulp and Paper Limited, Corner Brook, NL
Mr. Eugene Mercier, Employee, Corner Brook Pulp and Paper Limited,
Corner Brook, NL
Mr. Israel Hann, Private Citizen, Corner Brook, NL

In Labrador City on November 26, 2003

Mr. Dave Porter, Vice-President, Human Resources, Iron Ore Company of Canada,
Labrador City, NL
Mr. John McGrath, Director of Human Resources, Wabush Mines, Wabush, NL
Mr. Matt Simpson, Iron Ore Company of Canada, Labrador City, NL
Mr. Graham Letto, Mayor, Town of Labrador City, Labrador City, NL
Mr. Jim Farrell, Mayor, Town of Wabush, Wabush, NL
Mr. George Kean, President, United Steelworkers Local 5795,
Iron Ore Company of Canada, Labrador City, NL
Mr. Tom Kent, Vice-President, United Steelworkers Local 6285, Wabush Mines, Wabush, NL
Mr. Jody Kelly and Mr. Elmo Bingle, Hyron Board and the Labrador West Chamber of Commerce, Labrador West, NL
Mr. Ern Condon, Private Citizen, Labrador West, NL
Ms. Shirley Squires, Private Citizen, Labrador West, NL
Mr. Ray Erger, Owner, Kentech Computers; Employee, Iron Ore Company of Canada,
2nd Vice-President, Labrador City Chamber of Commerce and a member of Ground Search and Rescue, Labrador City, NL.

In Happy Valley-Goose Bay on November 27, 2003:

Mr. Dennis Peck, Director of Economic Development,
Town of Happy Valley-Goose Bay, Happy Valley-Goose Bay, NL
Ms. Carol Best, Central Labrador Economic Development Board, Labrador, NL
Mr. Jamie Snook, Combined Councils of Labrador, Labrador, NL
Mr. Gary Bolger, Mayor, Town of St. Lewis and an Executive Director, Combined Councils of Labrador (Presentation on behalf of the Towns of St. Lewis and Charlottetown, NL)
Ms. Betty Sampson, Town Clerk, Town of Port Hope Simpson, Port Hope Simpson, NL
Ms. Nina Pye, Mayor, Town of Mary's Harbour, Mary's Harbour, NL
Ms. Yvonne Jones, MHA, Cartwright-L'Anse au Clair, NL
Mr. Tony Woolfrey, Deputy Mayor, Town of Rigolet, Rigolet, NL
Mr. Leroy Metcalf, representing the Labrador Inuit Association, Labrador, NL
Mr. Glenn Sheppard, Mayor, Town of Postville, Postville, NL

In St. John's on December 8, 2003:

Mr. Maurice Tuff, B.Eng., President and CEO, Blue Line Innovations Inc., St. John's, NL
Mr. Danny Tuff, Vice-President, Marketing & Business Communications, Blue Line Innovations Inc., St. John's, NL

The Board appreciates the time and effort taken by those who appeared before the Board. The presentations and comments were very helpful in providing the Board with both personal and community perspectives and the Board has considered this input in making its decisions.

Interested persons and organizations were also given the opportunity to submit a Letter of Comment, which also formed part of the record before the Board. The Board also extends its appreciation to those persons and organizations submitting Letters of Comment. Letters of Comment were submitted by:

Mr. Newman Sinnicks, Hawke's Bay, NL
Ms. Doris Randell, Town Clerk/Manager, Town of Englee, Englee, NL
Mr. Allister J. Hann, Mayor, Town of Burgeo, Burgeo, NL
Ms. Mary Sillett, Mayor, Town Council of Hopedale, Hopedale, NL
Mr. Henry Broomfield, Mayor, Town Council of Nain, Nain, NL
Mr. Dave Denine, Mayor, City of Mount Pearl, Mount Pearl, NL
Ms. Phyllis Randell, Town Clerk, Town of Bide Arm, Bide Arm, NL
Mr. Stan Cook, Jr., President, Hospitality Newfoundland and Labrador, St. John's, NL
Mr. Cyril Taylor, Mayor, Town of Raleigh, Raleigh, NL
Mr. Brian Barry, President, Exploits Regional Chamber of Commerce, Grand Falls-Windsor, NL
Mr. Jim Goudie, Vice-President, Deer Lake Chamber of Commerce, Deer Lake, NL
Ms. Gloria Byrne, Corner Brook, NL
Mr. Ray Dillon, Director of Sales, Group Telecom, St. John's, NL
Ms. B. Knight, Labrador
The Town of St. Anthony, St. Anthony, NL
Mr. Neil Cleary, St. John's, NL
Mr. Herbert Brett, President, Newfoundland and Labrador Federation of Municipalities, St. John's, NL

In addition to witness testimony, public presentations and letters of comment, evidence was entered by way of information requests, consent filings, and information filings. The Board has considered all the evidence before it in this proceeding and will refer directly to the evidence in making its findings.

II. PRELIMINARY MATTERS

1. Government Direction

Pursuant to Section 5.1 of the *EPCA* the Lieutenant-Governor in Council (LGIC) is empowered to give directions respecting the policies and procedures to be implemented by the Board in determining rate structures for public utilities. This provision details some of the specific issues upon which a direction can be made, including the setting and subsidization of rural rates as well as the setting of a debt-equity ratio and rate of return for NLH. Pursuant to Section 5.2 of the *EPCA* and Section 4.1 of the *Act* the LGIC is empowered to exempt a utility from both *Acts* when it is in the best interests of the Province as a matter of public convenience or general policy.

Government's statutory power to direct, which has been exercised sparingly since its introduction became important in this hearing with the issuance of several directions to the Board in 2003. The following directions/exemptions were entered on the record in this matter as Information #1 (Appendix C):

- A direction to the Board with respect to the rates charged by NLH, including preferential rates, rural rates and rate changes generally;
- A direction to the Board to hold a hearing into the appropriate rate calculation methodology for the Labrador Interconnected System upon receipt of a complaint of discriminatory rates; and
- An exemption of the Wind Power Demonstration Project from the authority of the Board.
- A direction to ensure recovery in the rates of a utility of the costs of projects exempted from the provisions of the *Act* or the *EPCA* with the exception of the Lower Churchill Development Project.

The direction to the Board to ensure recovery in rates of the costs of exempted projects allows NLH to recover its costs without the oversight of the Board. With respect to the Application, exemptions authorized through Orders-in-Council in 2000 directed recovery in the rates of the costs associated with the following projects: (i) the Granite Canal Project; and (ii) the two power purchase agreements with Abitibi Consolidated of Canada, as agent for the Exploits River Hydro Partnership, and with Corner Brook Pulp and Paper Limited.

These directions were made with clear statutory authority and there was no challenge or argument from the parties as to the way in which these directions should be interpreted or reflected. The Board has accepted these directions as circumscribing its jurisdiction. The Board has reflected these directions in this Decision and Order and, where appropriate, has referenced the relevant direction in its analysis.

2. Complaint by the Towns of Labrador City and Wabush

One of the Government directives required that the Board hold a hearing with respect to the rate calculation methodology for the Labrador Interconnected System upon receipt of a complaint of discriminatory rates. On July 23, 2003 the Towns of Labrador City and Wabush filed a complaint with the Board concerning NLH's rate proposals for the Labrador Interconnected System. (Appendix E) The complaint alleged that NLH's proposed rates for Labrador West are discriminatory and requested that the Board conduct a hearing into the appropriate rate calculation methodology for the Labrador Interconnected System.

Beginning on September 20, 2003 the Board published notice of the complaint advising that the Board would convene in Labrador West to hear evidence with respect to the complaint. Consistent with the terms of the direction of the LGIC, the Board heard evidence and submissions relating to the complaint in Labrador City, Happy Valley-Goose Bay and St. John's. The Board has considered this evidence as well as the submissions of the parties in this Decision and Order.

3. Technical Conference/Mediation

Prior to the start of the hearing the Board set aside a number of days to allow for a technical conference. The purpose of the technical conference was to provide the parties with an opportunity to come to a consensus on certain issues in advance of the hearing. With the assistance of a Board appointed mediator, Dr. J. W. Wilson, the parties focused on cost of service allocation, rate structure and tariff matters.

The Board appointed mediator subsequently prepared a Mediation Report (Appendix H) detailing issues upon which there was consensus as well as those issues where there was no consensus. The parties consented to the filing of this report and the admission of all pre-filed evidence and exhibits of witnesses pertaining to the consensus issues without the calling of witnesses for the purpose of cross-examination.

The Board accepts the Mediation Report as reflecting the consensus of the parties. As contemplated in the Mediation Report the Board will review the evidence filed with respect to each issue, including pre-filed evidence and exhibits, in addition to the consensus set out in the report. In this Decision and Order, the Board has considered the consensus of the parties and the evidence that was filed and, where it determines that it is appropriate, has reflected the consensus in its findings. The issues set out in the Mediation Report are addressed specifically in the relevant section of this Decision and Order.

4. Settlement Agreement

Following the technical conference/mediation process NLH, NP, the CA and the IC held settlement discussions in relation to certain amendments to the Rate Stabilization Plan (RSP). The Towns of Labrador City and Wabush, whose rates are not subject to the RSP, did not participate in the settlement discussions. These discussions, while arising out of the technical conference process, were undertaken without the benefit of a Board appointed mediator and did not involve Board staff or Board counsel. On November 13, 2003 NLH filed as Consent #2 and Consent # 3 proposed amendments to the RSP which were intended to be effective on January 1, 2004. The participating parties consented to the filing of the proposal except that the IC took no position with respect to the amendments of the provisions with respect to the recovery of the plan balances. On December 15, 2003 the Board accepted the proposals in Order No. P. U. 40(2003) ordering that the proposed amendments to the RSP be put in place as of January 1, 2004. (Appendix J)

III REGULATORY UPDATE

1. Progress in Regulating NLH

In Order No. P. U. 7(2002-2003) the Board noted the related application represented NLH's first general rate review in ten years and its first as a fully regulated utility. The Board indicated that the application presented a host of regulatory challenges impacting a variety of stakeholders, including consumers of electricity, Government, and NLH. The Board acknowledged it would take time to address all such challenges and lay the groundwork for the effective regulation of NLH into the future. In Order No. P. U. 7(2002-2003) the Board identified a number of strategic considerations designed to establish appropriate regulatory objectives both for the 2001 general rate application and looking ahead. These strategic considerations were:

- Regulatory Framework;
- Public Policy Considerations;
- Pace of Regulation;
- Decision Criteria; and
- Focus for the Future.

In implementing an effective regulatory regime for NLH the Board is encouraged by progress respecting these considerations, as indicated below.

Regulatory Framework

As NLH's 2001 general rate application was its first as a fully regulated utility, the Board outlined in Order No. P. U. 7(2002-2003) a framework for guiding the regulation of NLH. This regulatory framework was consistent with that applied to NP, the other fully regulated utility operating in the Province. This framework was also detailed in Order No. P. U. 19(2003) arising from NP's latest general rate application and is again recited in this Decision and Order. The framework includes the statutory powers of the Board, jurisprudence, established Board procedures, regulatory principles and description of the ratemaking process. The Board believes a stable, consistent and efficient regulatory framework is important to sound regulation. Following the experience in this NLH's second application as a fully regulated utility, the Board sees no compelling reason why this framework should not continue to apply in regulating both NLH and NP. In this way both utilities will have a proven, predictable and consistent regulatory environment within which to operate. The Board acknowledges changes in this framework may be necessary from time to time, triggered by either legislative imperatives and/or Board initiatives.

Public Policy Considerations

Public policy considerations created a dilemma for the Board in NLH's first general rate application as a fully regulated utility in 2001. The Energy Policy Review initiated by Government in 1998 remained unresolved and numerous other public policy issues were identified impacting the regulatory decisions of the Board. These included the level of cross-subsidization applied to rural rates, the implications on NLH's capital structure of dividends paid to Government, and preferential electricity rates afforded selected customers located in communities served by isolated diesel systems. In this Application Government has directed the Board on a number of matters concerning rural and preferential rates. The Board notes, despite meetings with Government and submission of discussion papers, the evidentiary record ordered by the Board in Order No. P. U. 7(2002-2003) indicated NLH received no response from Government on either the rural deficit or a supportive dividend policy/capital structure. While additional consultation has occurred on the Energy Policy Review since Order No. P. U. 7(2002-2003) no policy implementation has resulted to date. Sources of new supply, accounting for a significant portion of the increased rates sought in this Application, were also exempted by Government from the Board's jurisdiction. In considering these issues the Board is cognizant of its statutory obligations to consumers to ensure an equitable and adequate supply of power at the lowest possible cost consistent with reliable service. Following this, NLH's second Application as a fully regulated utility, the Board believes ambiguity exists involving Government and NLH such that public policy considerations should be appropriately reviewed in advance of NLH's next general rate application. These issues are addressed separately in this Decision and Order.

Pace of Regulation

Since NLH's 2001 general rate application was its first since becoming a fully regulated utility in 1996, in Order No. P. U. 7(2002-2003) the Board expressed concern with the pace of regulation. This Order directed NLH to file its next general rate application before December 31, 2003, and ordered NLH to fulfill a considerable number of regulatory requirements. NLH submitted its original Application on May 21, 2003 in advance of the deadline and met the numerous regulatory directives of the Board in a timely and thorough fashion. The Board commends NLH and its staff for their responsiveness to Order No. P. U. 7(2002-2003). The Board believes that the regulation of NLH is now proceeding at an acceptable pace and looks forward to sustaining this momentum following this Decision and Order.

Decision Criteria

In Order No. P. U. 7(2002-2003) the Board noted its regulatory decision-making would balance both short and long term goals and convey a clear and consistent message to stakeholders. The Board favours sustainable policy/decision-making which contributes to a supportive and stable regulatory environment. The Board will focus on proactive and sustainable policy/decision-making throughout this Decision and Order.

Focus for the Future

In implementing a sound regulatory environment for NLH the Board emphasized in Order No. P. U. 7(2002-2003) it would focus on implementing appropriate policies and procedures for the ongoing regulatory supervision of the utility. The Board respects NLH's right to manage the utility in the manner it sees fit. The Board has once again in this Decision and Order focused on broad based planning and policy considerations including strategic and corporate goals linked to corresponding management and operating performance measures, integrated resource planning, business improvement processes, productivity/efficiency initiatives and improved regulatory reporting and accountability.

The Board acknowledges NLH remains in transition in terms of its operation as a fully regulated utility. This situation is not unexpected in that effective regulation will require the ongoing commitment of the utility, the Board and other stakeholders. The strategic considerations outlined in Order No. P. U. 7(2002-2003) continue to reflect a sound foundation on which to regulate NLH in the future.

2. Current Industry Structure

The following provides an update to the current industry structure contained in Order No. P. U. 7(2002-2003).

Electrical services in the Province of Newfoundland and Labrador are provided by two utilities, NLH, which is a Crown corporation, and NP, an investor owned subsidiary of Fortis Inc. NLH is principally responsible for generation and transmission in the Province, with a relatively small amount of distribution in predominately isolated rural areas. NP operates solely on the Island portion of the Province and is primarily a distribution company with some generating capacity.

Together NLH and NP supply, transmit and distribute electricity to 255,100 domestic and general service customers. NP's operations on the Island service 220,000 customers or 86% of all general service and domestic customers. NLH serves the remaining 14% or 35,100 customers as well as 4 regulated industrial customers and 1 non-regulated industrial customer.

There are two major electrical systems operating within the Province. The Island Interconnected System functions as a stand-alone system comprising various hydro-electric developments and thermal power generated at Holyrood. The Labrador Interconnected System is supplied by Churchill Falls and is connected to the North American power grid. The more remote and isolated areas of the Province are serviced by individual diesel generating facilities owned and operated by NLH.

The table on the following page updates the generation capacity on the Island since NLH's 2001 general rate application.

Island Generation Capacity (MW)				
	2001[1]		2003[2]	
Producer	**Capacity**	**%**	**Capacity**	**%**
NLH Island Hydro	887.4	48.27	927.3	48.13
NLH Island Thermal	598.2	32.54	598.2	31.05
NLH Isolated Island	7.9	0.43	7.6	0.39
NP	147.4	8.00	147.4	7.65
Deer Lake Power	121.4	6.58	121.4	6.30
Abitibi Consolidated	58.5	3.15	58.5	3.04
Non Utility	19.0	1.03	66.3	3.44
Total	**1839.8**	**100%**	**1926.7**	**100%**

[1] Order No. P. U. 7 (2002-2003), pg. 17
[2] Extract : (Pre-filed Evidence, J. R. Haynes, Schedule II);
(Revised Evidence, F. H. Martin, Schedule IV, Aug. 12, 2003).

The net increase in Island generation capacity is primarily attributable to new sources of supply as follows:

Producer/Source	Change
NLH Island Hydro	
- Granite Canal	+40.0
Non-Utility Generators/Power Purchased Agreements	
- Corner Brook Pulp and Paper Limited	+15.0
- Exploits River Hydro Partnership	+32.3
Total Increase in capacity	**87.3**
Less: NLH Isolated Island	- 0.3
Net Increase in capacity	**87.0**

(Pre-filed Evidence, J. R. Haynes, pg. 34)

On the Island NLH has approximately 1,533 MW of installed capacity consisting of 927.4 MW of hydro-electric generation from Bay d'Espoir, Upper Salmon, Cat Arm, Hinds Lake and Granite Canal, 598.2 MW of thermal generation from Holyrood and various gas and diesel units and 7.6 MW of isolated diesel generation. NLH also owns 3,380 km of high voltage transmission lines, and 2,516 km of distribution lines.

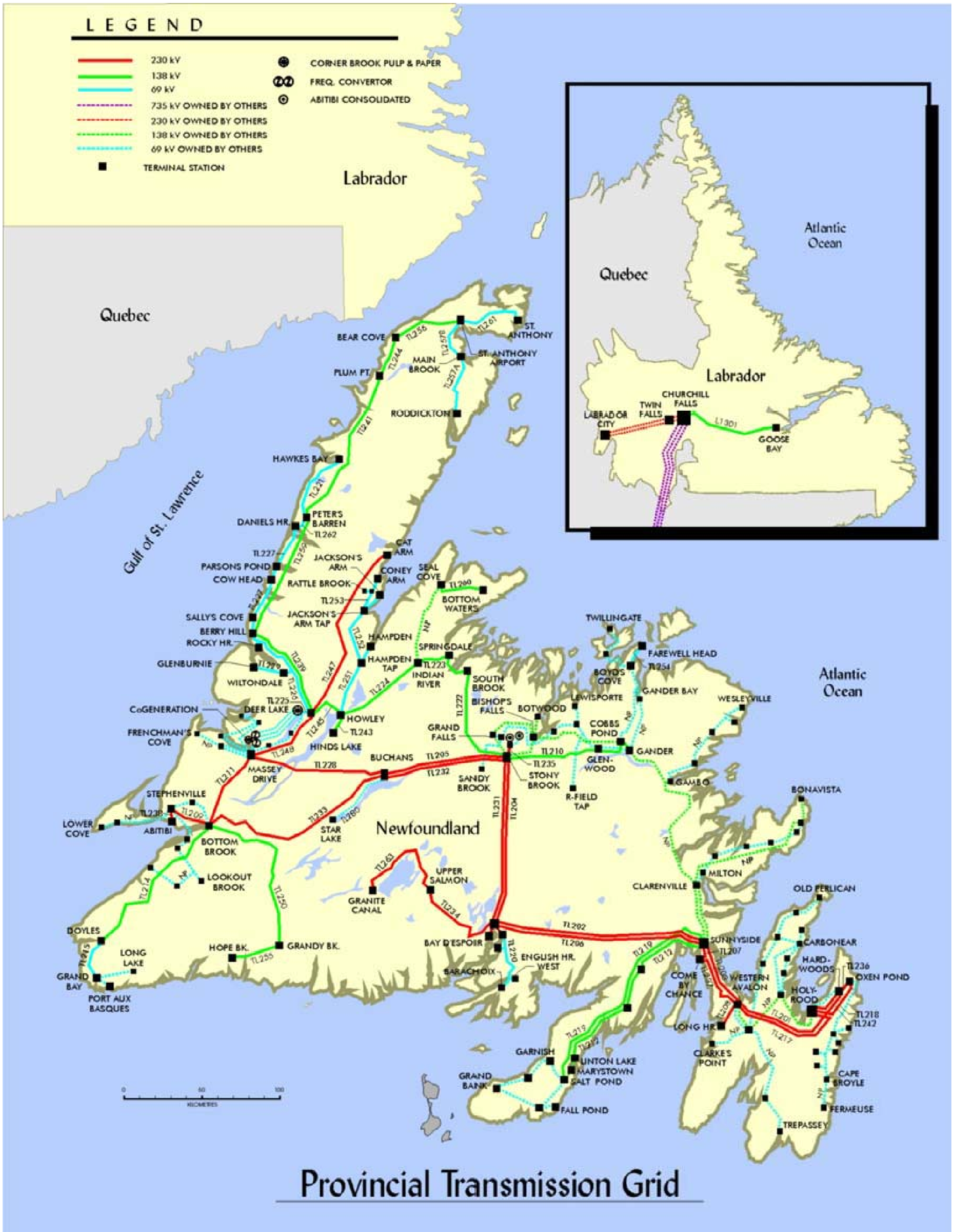
NP's generating capacity is 93.2 MW from its various hydro-electric generating sites and 54.2 MW from thermal generation. NP purchases approximately 90% (4,772.7 GWh forecast for 2004) of its energy requirements from NLH.

Energy generated by Deer Lake Power and Abitibi Consolidated Company of Canada is used primarily for paper mill operations in Corner Brook and Grand Falls-Windsor respectively. In situations where energy production exceeds operational requirements at the mills, NLH will purchase the excess for the Island grid, as required and if it is cost effective. Under agreements, NLH also purchases power from four Non Utility Generators: the Star Lake Hydro Partnership (15 MW); Algonquin Power (4 MW); Corner Brook Pulp and Paper Limited (15 MW); and the Exploits River Hydro Partnership (32.3 MW).

On the Island system NP operates in the majority of areas excluding the South Coast, Little Bay Islands and St. Brendan's. In these areas service is supplied by NLH using 8 isolated diesel generation and distribution systems. Service is supplied to the Great Northern Peninsula by NLH through the Island Interconnected System.

In Labrador NLH provides service to all customers. Power is purchased (2,362 GWh in 2003) from Churchill Falls to supply the Labrador Interconnected System consisting of the Towns of Labrador City and Wabush and the Happy Valley-Goose Bay area. In the isolated coastal areas NLH operates 16 diesel generation facilities with a combined capacity of 22.9 MW. NLH also buys a small amount of energy from a private company in Mary's Harbour and secondary energy, when available, for the L'Anse au Loup system from Hydro Quebec's Lac Robertson hydro plant. For the L'Anse au Loup system, forecast energy requirements in 2004 will largely be met by .466 GWh of diesel operation and 16.34 GWh of power purchased from Hydro Quebec.

The Provincial Transmission Grid and the Provincial Isolated Systems (Diesel) are shown on the following pages.



(Revised Evidence, F. H. Martin, Schedule II, Aug. 12, 2003)

(Revised Evidence, F. H. Martin, Schedule III, Aug. 12, 2003)

IV. STATUTORY POWERS AND RESPONSIBILITIES

The statutory powers and responsibilities described below are consistent with those set out in Order No. P. U. 7(2002-2003) and are intended to communicate to the utilities and other stakeholders the fundamental regulatory framework used by the Board in issuing its decisions, findings and subsequent Orders.

The Board is an independent, quasi-judicial body established under Provincial legislation to regulate public utilities in the Province. Regulation is designed to ensure consumers receive safe and reliable electricity at rates that are reasonable while allowing the utility to earn a fair return on its investment in supplying the electrical service. Regulation strives to strike an equitable balance between the interests of consumers and the utility.

The regulatory framework of the Board consists of five cornerstones, as follows:

i. BOARD AUTHORITY sets out the legislative and legal powers and responsibilities of the Board.
ii. BOARD HEARING PROCEDURES govern the presentation of the evidentiary record on matters before the Board.
iii. REGULATORY PRINCIPLES which are commonly accepted in guiding sound public utility regulation.
iv. THE RATE SETTING PROCESS is founded in accounting, engineering and economic methodologies which are applied in combination with i), ii) and iii) and weighed by the Board in making decisions affecting rates.
v. REPORTING/COMPLIANCE provides appropriate regulatory monitoring of the utility's ongoing activities and compliance with Board Orders.

1. Board Authority

Mandate

The Board's authority is derived from its statutory powers and responsibilities as set out in the *Public Utilities Act* (the *"Act"*) and the *Electrical Power Control Act 1994 (S.N. 1994, Chapter-E-5.1)* (the *"EPCA"*).

The *Act* sets out the structure of the Board and defines its powers. The Board has responsibility for the general supervision of public utilities in the Province, which requires the Board to approve rates, capital expenditures and other aspects of the business of public utilities.

In addition to the provisions of the *Act*, the Board is also mandated through the *EPCA*, particularly Section 3, which states the power policy of the Province as follows:

"3. It is declared to be the policy of the province that

(a) the rates to be charged, either generally or under specific contracts, for the supply of power within the province

(i) should be reasonable and not unjustly discriminatory;

(ii) should be established, wherever practicable, based on forecast costs for that supply of power for 1 or more years;

(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; and

(iv) should be such that after December 31, 1999 industrial customers shall not be required to subsidize the cost of power provided to rural customers in the province, and those subsidies being paid by industrial customers on the date this Act comes into force shall be gradually reduced during the period prior to December 31, 1999;

(b) all sources and facilities for the production, transmission and distribution of power in the province should be managed and operated in a manner

(i) that would result in the most efficient production, transmission and distribution of power;

(ii) that would result in consumers in the province having equitable access to an adequate supply of power;

(iii) that would result in power being delivered to consumers in the province at the lowest possible cost consistent with reliable service…"

Section 4 of the *EPCA* states:

"4. In carrying out its duties and exercising its powers under this Act or under the Public Utilities Act, the public utilities board shall implement the power policy declared in section 3, and in doing so shall apply tests which are consistent with generally accepted sound public utility practice."

In summary, the *EPCA* mandates the Board to make rate decisions that are reasonable and not unjustly discriminatory. Rates are to be based on forecast costs for the supply of power for one (1) or more years. This timeframe in practice is generally referred to as the *"test year(s)"*. The legislation also ensures that the utilities are permitted to earn a just and reasonable financial return while maintaining a sound credit rating in the financial markets of the world. The legislation calls for the most efficient production, transmission and distribution of power that will afford consumers the lowest possible cost electricity consistent with equitable, safe and reliable service.

Form of Regulation

With regard to the form of regulation, Section 80(1) of the *Act* states:

"80. (1) A public utility is entitled to earn annually a just and reasonable return as determined by the Board on the rate base, as fixed and determined by the Board for each type or kind of service supplied by the public utility…"

This is commonly referred to as return on rate base regulation. Rate base consists largely of investment by the utility in plant and equipment and historically has constituted the statutory form of regulation used in the Province. Return on rate base regulation is more fully described in relation to the Rate Setting Process. Alternative forms of regulation in place elsewhere include Return on Equity (ROE) and/or an emerging trend toward Performance Based Regulation (PBR).

Statutory Limitations

The legislative authority of the Board is, nonetheless, subject to two limitations (Sections 5.1 and 5.2) in the *EPCA* as follows:

> *"5.1 Notwithstanding section 3 and section 4 of the Act and the provisions of the Public Utilities Act, the Lieutenant-Governor in Council may direct the public utilities board with respect to the policies and procedures to be implemented by the board with respect to the determination of rate structures of public utilities under the Public Utilities Act and, without limiting the generality of the foregoing, including direction on the setting and subsidization of rural rates, the fixing of a debt-equity ratio for Hydro and the phase in, over a period of years from the date of coming into force of this section, of a rate of return determination for Hydro and the board shall implement those policies and procedures.*
>
> *5.2 The Lieutenant-Governor in Council may exempt a public utility from the application of all or a portion of this Act where the public utility is engaged in activities that in the opinion of the Lieutenant-Governor in Council as a matter of public convenience or general policy are in the best interest of the province, to the extent of its engagement in those activities."*

Appeal Process

Section 99 (1) of the *Act* states the statutory authority embodied in an Order of the Board as follows:

> *"An appeal lies to the Court of Appeal from an order of the board upon a question as to its jurisdiction or upon a question of law, but the appeal can be taken only by leave of a judge of the court, given upon an application presented within 15 days after the making of the decision and upon the terms that the judge may determine."*

An Order of the Board has the force of law and is binding on the parties and can only be appealed to the Court of Appeal on an issue of law or jurisdiction of the Board.

Stated Case

The most comprehensive judicial consideration of the authority of the Board comes from the comments of Mr. Justice Green in <u>Newfoundland (Board of Commissioners of Public Utilities)(Re)</u>(1998), 64 NFLD. & PEI R.60 (NFLD.C.A.) In 1998 the Board stated a case for the consideration of the Court of Appeal pursuant to Section 101 of the *Act*. Mr. Justice Green set out some general principles that apply to all decisions of the Board, which may be summarized as:

1. The *Act* should be given a liberal interpretation respecting the purpose of the legislation and the power policy of the province;
2. The Board has discretion in how it approaches its mandate;

3. The Board has all appropriate and necessary powers;
4. The Board must balance the interests of public utilities and electrical consumers;
5. The Board sets rates prospectively, after a full consideration of all available evidence; and
6. The Board has discretion to choose the approach to setting rates as long as it observes the legislation and sound utility practices.

The Court was clear in setting out that the Board must balance two sets of interests - the utility's right to a fair return and the consumer's right to reasonable access to power. Mr. Justice Green notes that the Board must be careful to balance both interests, when he says, at para. 144:

> *"It must always be remembered that, as has been emphasized throughout this opinion, the Board is charged with balancing the competing interests of the utility and the consumers of the service it provides. Neither set of interests can be emphasized in complete disregard of the interests of the other. Thus, in choosing to exercise a particular power within the Board's jurisdiction, the Board must always be mindful of whether, in so acting, it will be furthering the objectives and policies of the legislation and doing so in a manner that amounts to a reasonable balance between the competing interests involved."*

In conclusion, the Court found that the Board can be regulative and corrective but not managerial in its prospective regulation of a utility. The Board notes that the Court of Appeal suggested that the Board should observe a presumption of managerial good faith.

2. Board Procedures

The Board's procedures are governed by the relevant legislation and, as a quasi-judicial body, the principles of natural justice and procedural fairness apply. The *Act* and *Regulation 39/96* both set out procedures for the Board. In addition to prescribed regulations, Section 26 of the *Act* enables the Board to establish its own procedures. This permits the Board to exercise discretion to allow for a more informal and flexible treatment of issues.

The procedures of the Board address items such as the form of the application, public notice, submission by intervenors, information requests, document exchange along with rules and protocol surrounding public hearings. While the procedures in a hearing before the Board are less formal than a court, the principles of natural justice are still observed. Sufficient notice is given to all interested persons who are provided with the opportunity to participate. Witnesses are sworn, and their testimony is heard by way of both direct and cross-examination. Evidence is entered and documented and the Board maintains a full and complete record.

Hearing documentation is generally filed in electronic format with a paper copy maintained as the official Board record. The Board provides public access to all information through the Board's web site (**www.pub.nf.ca**). The web site is updated daily with transcripts and additional evidence filed during each day's proceedings posted in advance of the commencement of the hearing the following day. During the hearing the evidence can also be viewed simultaneously by the Board, parties and witnesses on monitors located in the Hearings Room.

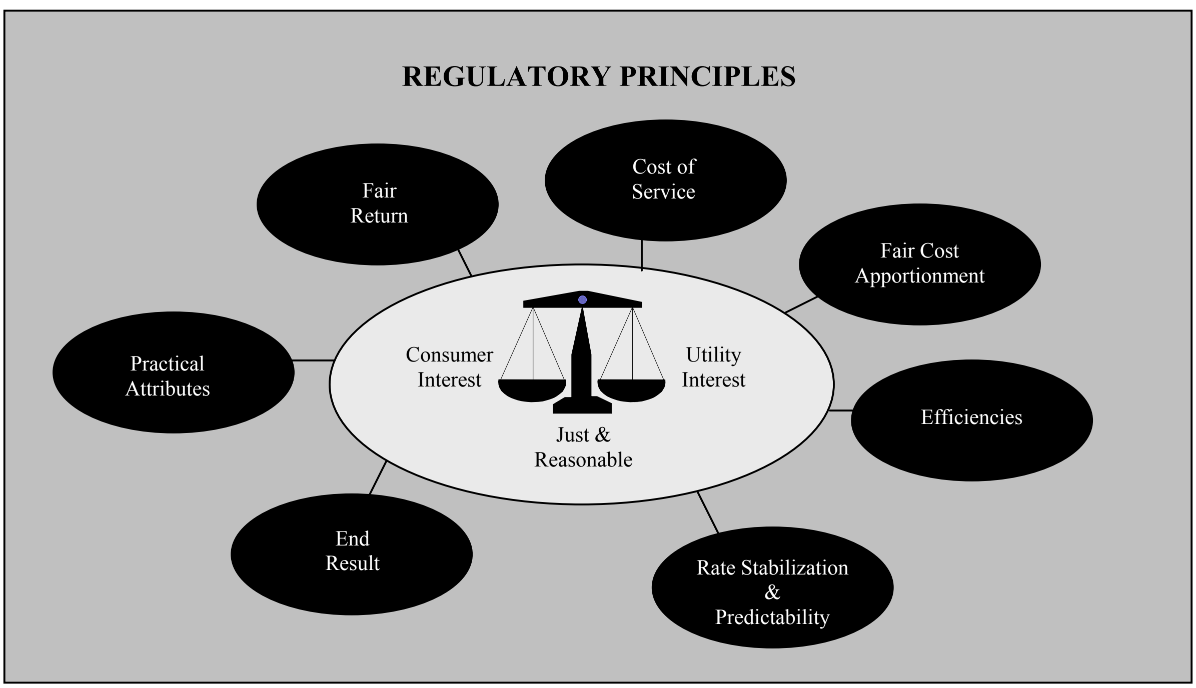
Through these procedures the Board ensures that the process is accessible and transparent for stakeholders, including the public. The Board may also travel throughout the province to hear from interested persons or organizations. Full and informed public debate and discussion on the issues is encouraged through the participation of the parties, the general public and, for major hearings, a government appointed consumer advocate.

After full consideration of all of the evidence the Board will issue a reasoned decision, usually in writing. A Decision and Order of the Board will be issued and, as noted previously, can only be appealed to the Court of Appeal.

3. Regulatory Principles

Sound regulatory practices encompass fundamental principles which are used by regulators as a guide or roadmap to rational decision-making. As stated in the Bonbright J. C., Danielsen A.L, Kamerscen D.R., Principles of Public Utility Rates (Arlington: Public Utilities Reports, Inc., 1988): "*We are simply trying to identify the desirable characteristics of utility performance that regulators should seek to compel through edict.*" These are commonly referred to as Bonbright's principles.

Section 4 of the *EPCA* directs the Board to apply tests that are consistent with generally accepted sound public utility practice. The Board sets out the following principles for purposes of its regulatory framework:



1. <u>Fair Return</u>
Regulated utilities are given the opportunity to earn a fair rate of return. To be considered fair, the return must be:

- commensurate with return on investments of similar risk;
- sufficient to assure financial integrity; and
- sufficient to attract necessary capital.

The fair return principle is consistent with both Section 80(1) of the *Act* and Section 3(a)(iii) of the *EPCA*.

2. <u>Cost of Service</u>
Under this principle a utility is permitted to set rates that allow the recovery of costs for regulated operations, including a fair return on its investment devoted to regulated operations - no more, no less. Costs should be:

- prudent;
- used and useful in providing the service;
- assigned based on cause (causality);
- incurred and recovered (matching costs and benefits) during the same period; and
- reflective of private/social costs and benefits occasioned by the service.

3. <u>Fair Cost Apportionment</u>

Fairness of specific rates in the apportionment of total costs of service among the different ratepayers should be such so as to avoid arbitrariness, capriciousness, inequities or discrimination. Under this principle, customers in similar situations should be treated equally (horizontal equity), while those in different situations should be treated differently (vertical equity). This principle would not deny cross-subsidization of rates among customers of equal circumstances but such subsidization should not cause undue discrimination. The principle of horizontal equity (i.e. equals treated equally) is set forth in Section 73(1) of the *Act* which requires that *"all tolls, rates and charges shall always, under substantially similar circumstances and conditions in respect of service of the same description, be charged equally to all persons and at the same rate, …"*. Furthermore, the aspect of undue discrimination also has statutory reinforcement in Section 3(a)(i) of the *EPCA* which declares it to be "*…the policy of the province that the rates to be charged ………should be reasonable and not unjustly discriminatory."*

4. Efficiencies

Rate classes and rate blocks should discourage wasteful use of service while promoting all types and amounts of use that are economically justified. Greater efficiency should also be encouraged in promoting innovation and responding economically to changing demand and supply patterns.

5. Rate Stability and Predictability

Rates and revenues should be stable and predictable from year to year with a minimum of unexpected changes seriously adverse to either ratepayers or utility companies. This principle may justify smoothing out increases to avoid sharp rate climbs or temporary fluctuations. The emphasis using this standard relates to the timing of rate implementation.

6. End Result

In compliance with the legislation, the end result must be fair, just and reasonable from the perspective of both the consumer and utility.

7. Practical Attributes

Rates should be simple, understandable and publicly acceptable with a minimum of controversy upon implementation.

While setting out these principles may be useful to ensure full consideration of all the issues, the Board notes that at times they may contain ambiguities, conflict with legislation, be inconsistent and/or hold different priorities. The real challenge for the Board, in keeping with its legislative mandate, is to balance ofttimes competing objectives within the regulatory environment to ensure a set of sound and reasoned decisions serving the interests of both consumer and utility alike.

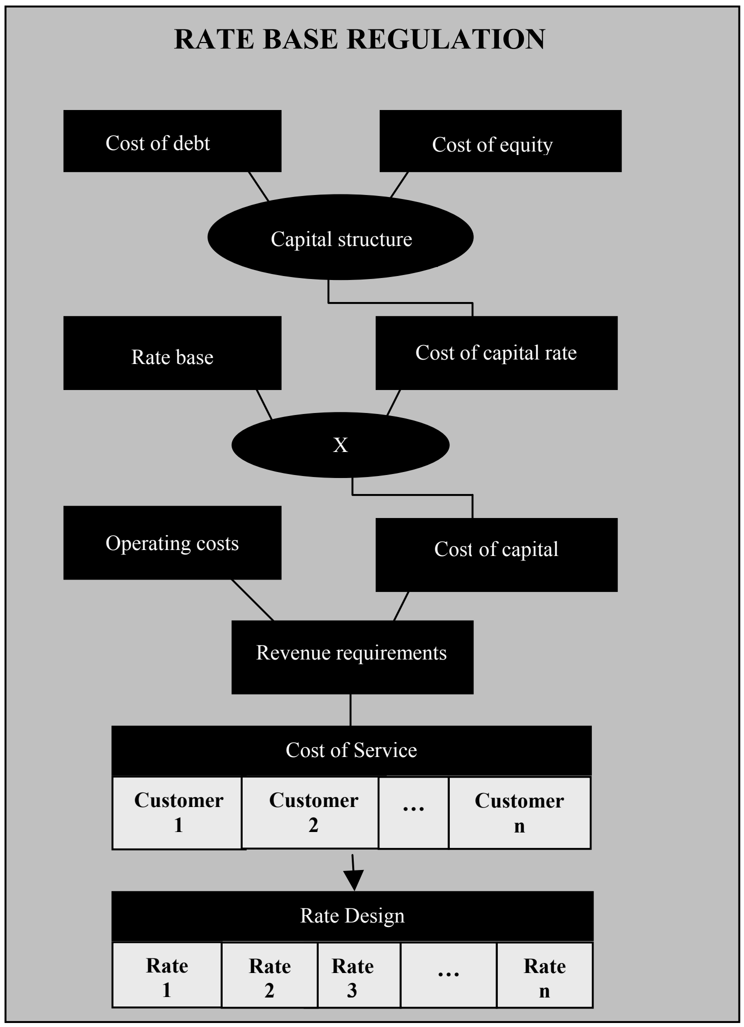
During rate proceedings the Board is often petitioned by intervenors and presenters to consider the customers' ability to pay when setting rates for various classes of customers and service. While cross subsidization of a group of customers contributing toward the cost of service assigned to another group of customers is a common regulatory practice, the ability of an individual customer to pay for the electrical service consumed is not considered by the Board in setting rates. Without compelling change in either legislation, public policy or structure of regulation, the Board will continue to pursue generally accepted regulatory principals as outlined above which does not incorporate ability to pay among its criteria for rate setting.

4. The Rate Setting Process

The rate setting process is founded in accounting, engineering and economic methodologies and is the proverbial glue that binds the regulatory framework. The Board's authority, the evidence and regulatory principles are combined by the Board through this process to make decisions affecting rates. The rate setting process is described below under the heading *"Rate Base Regulation"*.

Rate Base Regulation

As noted previously, pursuant to Section 80 of the *Act*, the regulatory framework of the Board is founded in rate base regulation. The elements of rate base regulation are illustrated as follows:



(As modified from *"Basics of Canadian Rate Regulation",* pg. 13, by J. T. Browne and Charles Perron, Deloitte & Touche, 1997.)

The focus of return on rate base regulation is on earnings, in particular the allowed return per dollar of investment (rate base). Rates are set to give the regulated utility the opportunity to recover its revenue requirement consisting of its estimated operating costs and a fair return on its rate base. These costs are generally estimated for a test year(s) for which the rates are set.

Rate Base

Rate base is the amount of investment on which a regulated utility is allowed to earn a fair return. Rate base comprises primarily depreciated investment in plant and equipment plus working capital as well as certain deferred assets/costs attributable to future operations. Regulators tend to focus on whether additions to the rate base, looking at the asset, are needed and if the cost is reasonable.

Capital Structure

Capital structure is the relative amounts of equity and debt, commonly referred to as the debt to equity ratio, which comprises a company's total invested capital. The total invested capital represents the funds invested in the public utility by shareholders (equity) and by bondholders and other long-term debt holders (debt). The just and reasonable rate of return allowed on rate base is equivalent to the cost of capital representing the sum of the weighted costs of both debt and equity in the capital structure.

Revenue Requirement

Revenue requirement is the amount of revenue required by a utility to cover the sum of operating costs including debt service, depreciation, taxes and allowed return on rate base ($ rate base x cost of capital). The revenue requirement is the total amount of money a utility is eligible to collect from customers through rates:

Revenue Requirement = Operating Costs + (Rate Base x Rate of Return)

From a regulatory perspective, efficient operations, fully justified capital expenditures and a low cost capital structure all combine to minimize revenue requirement, and hence provide least cost electricity to ratepayers.

Cost of Service

Cost of service constitutes the basis on which the utility's revenue requirement is allocated to each class of customer served. The utility normally submits a study of the costs incurred in purchasing, producing, transmitting and distributing electricity to its customers, by customer class.

Rate Design

Once the cost of service or revenue requirement is allocated by customer class, specific rates are determined to recover the required costs/revenues from each customer within the class.

5. Reporting/Compliance

Reporting/Compliance is the mechanism used to monitor the ongoing activities of the utility from a regulatory perspective and is an important part of the regulatory framework. Section 16 of the *Act* states:

> *"The board shall have the general supervision of all public utilities, and may make all necessary examinations and inquiries and keep itself informed as to the compliance by public utilities with the law and shall have the right to obtain from a public utility all information necessary to enable the board to fulfil its duties."*

Consistent with the Court of Appeal's findings, the role of the Board is not to exercise managerial influence but to ensure appropriate reporting/compliance mechanisms are in place such that regulatory objectives are met. The objective of the Board is to focus on regulatory accountability of the utility rather than engage in detailed reviews and costly controls. In keeping with this approach, some examples of the Board's reporting/compliance requirements requested of the utilities include:

- Compliance with Board Orders;
- Annual financial review;
- Quarterly reports;
- Incident/Outage reports;
- Technical reports;
- Productivity, cost benefit and efficiency studies;
- CIAC audits; and
- Monitoring complaints.

6. Summary

A consistent and equitable regulatory framework is in the interests of both the regulated utilities and consumers. The framework as described above has been in place in one form or another since the Board was established in 1949. This framework has evolved to date through a series of legislative amendments and case law and will continue to form the basis of the Board's exercise of its regulatory authority under existing legislation, both in this Decision and Order and on a go forward basis.

PART TWO. BOARD DECISIONS

I. CAPITAL STRUCTURE AND RETURN ON EQUITY

In its initial Application NLH proposed financial targets which included a return on equity (ROE) of 10.75% and a capital structure of 80% debt and 20% equity. NLH submitted it had no less business risk than a typical investor owned utility and, therefore, was prepared to accept the same return on equity as NP, the other regulated utility in this jurisdiction. Following the subsequent issuance of Order No. P. U. 19(2003) involving NP's most recent general rate application, NLH revised its proposed ROE to 9.75%, equivalent to that ordered for NP.

As was the case with NLH's 2001 general rate application, the evidence concerning NLH's capital structure and ROE was inextricably linked to issues of ownership, provincially guaranteed debt and treatment of NLH as an investor owned utility.

1. Government Guarantee

The Provincial Government guarantees NLH's debt. The Province receives compensation in the form of an annual fee equivalent to 1% of the previous year's total debt (net of sinking funds) outstanding as of December 31st. The evidence is clear that the ability of NLH to maintain a sound credit rating in the financial markets of the world is dependent on this Government guarantee, as was found by the Board in Order No. P. U. 7(2002-2003). NLH acknowledged this in its final argument referring to Ms. McShane's pre-filed evidence. (Final Argument, NLH, pg. 24/12-14) Ms. McShane noted NLH would not be financially viable at either its forecast or target capital structure in the absence of the guarantee and further noted that the guarantee enables NLH to raise debt at yields equivalent to those of the Province. (Pre-filed Evidence, K. McShane, pg. 19/6-8) Dr. Kalymon concurred that the financial structure of NLH would not be financially viable without the Provincial guarantee. (Pre-filed Evidence, Dr. B. Kalymon, pg. 11/7-8) Dr. Waverman commented the debt guarantee allows NLH to carry a higher proportion of debt in its capital structure than could be justified by an investor owned utility. (Pre-filed Evidence, Dr. L. Waverman, pg. 11/22-25) NP observed the guarantee fee enables NLH to borrow at reasonable rates that could not otherwise be achieved with NLH's capital structure. (Brief of Argument, NP, pg. C-14/19-20) In final argument the IC commented that the legislation is clear that NLH must secure and maintain a sound credit rating and that all parties to the hearing agreed that this comes by way of the Government guarantee. (Written Argument, IC, pg. 7)

NLH indicated the guarantee fee to be $14,684,000 for the 2004 test year. (Revised Evidence, J.C. Roberts, Schedule VII, Oct. 31, 2003) The methodology used in this calculation was supported by Grant Thornton's 2003 General Rate Hearing Report (pg. 12/6-9) which explained that the guarantee fee increased more than $2,000,000 over 2002 due to additional bond issues in 2002 and 2003 (pg. 36/22-24). CA-3 (Table 14) shows the guarantee fee decreasing to an estimated $13,200,000 in 2007 due primarily to declining long-term debt.

In final argument, NLH contended no party at the hearing raised any issue with respect to the amount of the guarantee fee included in the 2004 interest expense category. (Final Argument, NLH, pg. 24/24-25) Ms. McShane submitted it is extremely unlikely under most (if not all) market conditions that NLH, with 80% debt and no debt guarantee, could raise long-term debt at a rate less than 100 basis points above that of the Province and therefore the guarantee fee of 1% is reasonable. (Pre-filed Evidence, K. McShane, pg. 20/4-7) Dr. Kalymon expressed the view that the guarantee fee of the Province is not excessive if recognition is given to the fact a portion of the fee is providing compensation for the implicit equity investment. (Pre-filed Evidence, Dr. B. Kalymon, pg. 16/11-13) NP took no issue with the payment of the guarantee fee or its benefit to customers. (Brief of Argument, NP, pg. C-14/18-19)

The Board accepts the level of the guarantee fee as being reasonable. The Board acknowledges the crucial role played by the Government guarantee in sustaining NLH's creditworthiness and enabling the utility to borrow in the capital markets at reasonable rates. Mr. Roberts stated NLH's position for the short term over the next five to seven years is for an 80/20 capital structure with continuation of a guarantee fee. (Transcript, Oct. 15, 2003, pgs. 127/4-13; 128/12-24) Mr. Roberts further acknowledged that a 60/40 capital structure reflecting a stand-alone credit rating without a guarantee is not practically achievable for NLH within a 10-15 year time horizon. It is recognized by the Board that the Government guarantee fee will be necessary to ensure NLH's creditworthiness into the foreseeable future.

The Board accepts that the Government guarantee plays a key role in supporting NLH's ability to maintain a sound credit rating in the financial markets of the world and to access needed capital at reasonable rates.

2. Dividends/Capital Structure

Beginning with the 1995/96 Provincial budget, NLH has been paying an annual dividend to Government as its sole shareholder. Whereas the initial dividend policy called for the dividend payment *not to cause a deterioration in the existing debt/equity ratio of the Corporation,* [Order No. P. U. 7(2002-2003), pg. 37], this policy was revised as follows:

> *"In May 2000 Hydro's Board approved a change in the dividend policy so that dividends of up to 75% of Hydro's net operating income before net recall revenue for the year plus 100% of net recall revenues received could be paid as a dividend provided that such payment shall only be made after due consideration has been given by the Board of the impact of such payment on the debt/equity ratio of Hydro. Net recall revenue commenced in 1998 when Hydro began selling power recalled under the CF(L)Co Power Contract to Hydro-Quebec.*"
> (Pre-filed Evidence, W. E. Wells, Schedule II - Discussion Paper on Hydro Dividends, pg. 2)

The historic and forecast dividends paid to Government in relation to both NLH's net regulated operating income and its resulting debt/equity ratio is shown on the following page.

Year	Dividends Paid During Year - ex Recall and CF(L)Co $(000)'s	Net Regulated Operating Income $(000)'s	As a % of Net Regulated Operating Income	Debt/Equity Ratio %
1995	14,500	22,829	64%	80.6/18.4
1996	9,688	20,693	47%	81.2/18.8
1997	12,357	31,351	39%	79.9/20.1
1998	10,489	24,847	42%	79.0/21.0
1999	1,309	13,015	10%	79.2/20.8
2000	10,026	5,829	172%	79.4/20.6
2001	9,773	11,918	82%	80.4/19.6
2002	65,723	9,743	675%	85.1/14.9
2003(F)	5,564	(4,110)	-	86.4/13.6
2004(F)	14,005	18,674	75%	86.0/14.0
Total	**153,434**	**154,789**		

F-forecast
Sources: (i) Pre-filed Evidence, W.E. Wells, Schedule II – Discussion Paper on Hydro Dividends, pgs. 2, 3 & 6;
(ii) Revised Evidence, J.C. Roberts, Schedules II, V, IX, Oct. 13, 2003;
(iii) Grant Thornton's 2003 General Rate Hearing Report, pg. 11;
(iv) CA-98; and
(v) CA-175.

While Order No. P. U. 7(2002-2003) acknowledged the payment of dividends as a matter between NLH and its shareholder, Government, the Board at the time expressed concerns regarding the extraordinary dividend (forecast $70,000,000) proposed for the test year 2002, both in terms of its impact on electrical consumers as well as NLH's target capital structure. The Board ordered interest expense and return on equity in the 2002 test year revenue requirement to be adjusted in keeping with NLH's stated dividend policy of 75% of net operating income and accepted NLH's proposals for a test year debt/equity ratio of 83/17 and a target short term debt/equity ratio of 80/20. The Board also recommended in Order No. P. U. 7(2002-2003) that NLH consult with Government on establishing a mutually appropriate and predictable dividend arrangement on a go forward basis. Acting on this recommendation, NLH held various meetings with senior levels of Government and prepared a Discussion Paper on this issue. The Discussion Paper was forwarded to the Deputy Minister of Mines and Energy on March 25, 2003. In the accompanying letter Mr. Wells stated the following:

> *"The Board expressed its concern that in the absence of a predictable and stable dividend policy, it would be difficult for either NLH or the Board to target an appropriate capital structure, or achieve it within a predictable timeframe."*

> *"Hydro, in consultation with its financial consultant, will be proposing a Debt/Equity ratio of 80/20, as its financial target. The Hydro Board had earlier confirmed that 80/20 was an appropriate Debt/Equity ratio for Hydro in 1996. If dividend payments remain at 75% of net income, Hydro would not be able to reach that target. In fact, it will require dividend payment of not more than 50% of net income for Hydro to achieve an 80/20 Debt/Equity ratio by 2010."*

Further, NLH concluded in its Discussion Paper (pg. 7):

"Hydro is suggesting that the current dividend payout policy of 75% would be replaced by a dividend policy of paying out 50% of net operating income. This policy would be fixed for the next five years and facilitates movement to the proposed debt to capital structure. It would also contribute to rate stability and predictability. Failure to adhere to such a policy could result in similar disallowances by the Board, thereby adversely impacting on shareholder returns".

NLH's response to PUB-87 indicates Government had advised NLH that it is considering the information on NLH's dividends and that Government will advise accordingly when decisions are made. NLH indicated a reply had not been received from Government to date. (Final Argument, NLH, pg. 45/9-11)

In final argument NLH reiterated the position outlined in its Discussion Paper to Government that its goal is to move towards the target capital structure of 80/20 over the next five years, which will require a modification of the current dividend policy. NLH suggested the evidence is clear that the forecast capital structure for 2004 of 86/14 does not adversely affect NLH's financial viability because of the provincial guarantee. NLH further submitted it is appropriate for the Board to endorse the target capital structure 80/20 recommended by Ms. McShane as a reasonable objective towards maintaining its self-supporting status. (Final Argument, NLH, pg. 45/1-19) NLH noted the 80/20 capital structure was accepted as a short term target in Order No. P. U. 7(2002-2003) and was recommended in a Board report as far back as 1992. (Final Argument, NLH, pg. 44/28-30)

NP argued NLH does not have the minimum equity in its capital structure which its own financial expert considers appropriate for a Crown owned utility and further, its capital structure has actually weakened since 2002, with a debt component that has increased from 83% to 86%. NP submitted NLH does not have a supportive dividend policy to permit material improvement in its capital structure and has not yet been able to formulate and implement a sound financial plan to achieve the capital structure appropriate for a Crown owned utility. NP accepted that the payment of dividends is a matter primarily between NLH, its Board of Directors, and its shareholder Government, but pointed out that NLH has an obligation under the *EPCA* to establish a capital structure that ensures long-term financial strength and creditworthiness and that consumers should not bear the consequences of NLH not having a sound financial plan in place to achieve this objective. (Brief of Argument, NP, pgs. C-13/16-26; C-14/1-7)

Both the Board and NLH have obligations in accordance with the power policy of the Province to maintain through their respective actions and decisions the long-term financial integrity and creditworthiness of NLH, which includes consideration of its capital structure as outlined in Section 3(a)(iii) of *EPCA*. Despite repeated goals set by NLH and endorsed in previous Board Orders of an 80/20 debt to equity ratio, the capital structure of NLH continues to deteriorate to where the forecast for 2003 and test year 2004 shows the greatest variance from this stated goal since the payment of dividends began in 1995. Since 1995 to test year 2004 forecast, the net operating income of NLH has been $154,789,000 with $153,434,000 or 99.1% paid out in dividends to Government.

According to its own expert, Ms. McShane, NLH's current and forecast capital structure exceeds the upper end of reasonableness (80% debt) which rating agencies view as compatible with a self-supporting Crown corporation, even backed with a government guarantee. (Pre-filed Evidence, K. McShane, pg. 17/4-5) Ms. McShane further explained that, while debt rating agencies are concerned with NLH's financial parameters on a consolidated basis and NLH's consolidated debt has been less than 70% since 1996, there is a low probability in the short term that a higher than target debt ratio (for the regulated entity) will impair the Province's debt rating. However, Ms. McShane maintained that a failure to progress toward the target will be perceived as an inability to operate as a self-supporting commercial enterprise. (Pre-filed Evidence, K. McShane, pgs. 17/24-26; 18/5-7) Dr. Waverman confirmed that those who rate NLH's debt pay close attention to the *"self-supporting"* rating of NLH, which mitigates concerns about the Provincial contingent liability given the debt guarantee. (Pre-filed Evidence, Dr. L. Waverman, pg. 6)

NLH was not in a position during this proceeding to express with any clarity Government's disposition regarding NLH's future retained earnings. While the Application is premised on NLH's current 75% dividend policy, it was clear from the evidence that the current 86/14 debt to equity ratio will only be reduced by 2008 to either 85%, 83%, or 81% depending on the respective dividend payout of 75%, 50% or 25% of annual net operating income and the allowed ROE. (Revised Evidence, J. C. Roberts, Aug. 12, 2003, pg. 10/Table 2) The Board received no assurances as to which of these scenarios holds the most likely prospect for NLH or, for that matter, whether or not a further extraordinary dividend may be required from retained earnings. Mr. Roberts did not rule out the potential for further deterioration of the capital structure should Government require additional funds from NLH as part of its equity. (Transcript, Oct. 15, 2003, pg. 134/17-20) Mr. Roberts noted the financial risk is represented by the degree of leverage associated with the capital structure and the more debt versus equity, the greater the leverage, and the greater the financial risk. Furthermore, if there is little equity, financial flexibility of NLH is reduced. (Pre-filed Evidence, J. C. Roberts, pg. 9/14-22) NLH maintains no financial plan to reach its target capital structure of 80/20 other than financial projections which are based on the existing 75% dividend policy and this assumption provides no significant improvement in the existing capital structure to 2008. NP and the IC noted that NLH has all but abandoned this prospect in this Application. Ms. McShane concurred it is not a practical goal given the only source of equity capital available to NLH is through retained earnings. (Transcript, Dec. 3, 2003, pg. 94/6-14; Written Argument, IC, pg. 7/10-11)

While continuing to acknowledge that the payment of dividends is a matter between NLH and its shareholder, Government, the Board has obligations concerning the impacts that such dividends/practices have on NLH as a regulated utility and hence its ratepayers. The Board is compelled by the evidence of Ms. McShane which states:

> *"The ability of Hydro 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 shareholders and management and thus permits reasonable planning on the part of both. It is also compatible with both the level of the utility's capital budget and the objective of maintaining a reasonable and stable capital structure. The predictability of the dividend policy is also in the best interests of ratepayers, who*

are then provided with the assurance that the cost of capital they incur in rates will be equal to the cost incurred by Hydro."
(Pre-filed Evidence, K. McShane, pg. 17/4-14)

Ms. McShane further stated:

A. (Ms. McShane) Well, I think that we have to, sort of start, where we are. And I do believe that based on what the debt rating agencies see other crown corporations doing, that if it continues to see Hydro's debt ratio staying at the current level or deteriorating, that it will have a tendency to view this corporation as not being fully self supporting. And I think it's important for Hydro to take its proposed change in dividend payout to the shareholder and convince that it's important for them to build up the equity in the corporation.
(Transcript, Dec. 3, 2003, pg. 92/12-23)

The Board concludes the only certainty regarding NLH's forecast capital structure is that it is uncertain. Mr. Wells stated:

A. (Mr. Wells) So, I don't know what the government's position, indeed in the circumstances in the province today, I mean, things may change. We just don't have an answer; we're not sure.
(Transcript, Oct. 9, 2003, pg. 25/10-13)

The Board emphasizes one of the key principles of sound regulatory practice is to maintain a stable and predictable regulatory environment which will foster a degree of certainty for management and a fairness and stability in electrical rates for consumers. The Board concludes that the uncertainty surrounding the dividend policies/practices of NLH and its shareholder, Government, does not afford the protection needed to ensure lowest cost, stable and predictable rates. Mr. Wells commented:

A. (Mr. Wells) Without assurances with respect to NLH's financial integrity the overall cost to supply electricity to customers will be higher over the longer term.
(Transcript, Oct. 6, 2003, pg. 72/5-12)

While Mr. Wells is referring in this statement to the need for NLH to sustain an appropriate return commensurate with risks in order to maintain lowest cost power in the long term, the same can be said for NLH's capital structure.

With regard to establishing an appropriate dividend policy, the Board agrees that management makes recommendations to the Board of Directors of NLH who adopt a position on a particular issue, but ultimately it is the shareholder who would have the final say. (Transcript, Dec. 3, 2003, pgs. 103/13-18; 104/6-7) The IC argued Government has ultimate control of the debt/equity structure of NLH and has demonstrated its propensity to withdraw funds from NLH according to its own requirements, regardless of the financial position of NLH. (Written Argument, IC, pgs. 9-10) In Order No. P. U. 7(2002-2003) the Board recommended that a mutually appropriate and predictable dividend policy would have to be resolved between NLH and Government in advance of this Application. No such policy was established.

Ratepayers are deserving of rates founded on a reasonable and stable capital structure premised on a predictable dividend policy, either an explicit policy established between NLH and its shareholder, Government, or a policy deemed by the Board in setting rates. The latter remains the only alternative available to the Board in this Decision.

The Board was presented with no evidence opposing a targeted capital structure for NLH of 80/20. The Board endorses once again NLH's proposal, as recommended by Ms. McShane, for a target capital structure of 80/20 debt to equity in order to ensure NLH is able to maintain its self-supporting status. The ultimate achievement of this objective is in the best interests of NLH and its ratepayers in contributing to fair and stable electrical rates. It is clear from the evidence that an 80/20 capital structure will only be realized by NLH within a reasonable period with a supportive and commensurate dividend policy being adopted by NLH. Ms. McShane indicates a reduction in the payout ratio is a reasonable approach to manage the achievement of the proposed capital structure ratios. (Pre-filed Evidence, K. McShane, pg. 17/18-20) Since the Board has no jurisdiction concerning the dividend policy or the actual payment of dividends by NLH to Government, the Board can only determine what dividends will be allowed for the purpose of setting rates. The evidence reflects a dividend policy of 25% of annual net operating income is most compatible in moving toward a self-supporting capital structure (80/20) within a reasonable timeframe consistent with NLH's stated objective. The Board notes a dividend policy of 75% will marginally reduce the existing 86/14 capital structure to 85/15 by 2008 and a 50% dividend policy, as recommended by NLH in its Discussion Paper to Government, will only effect a reduction in capital structure to 83/17 by 2008. A dividend policy of 25% will reduce the existing capital structure to 81/19 by 2008. (Revised Evidence, J. C. Roberts, Aug. 12, 2003, pg. 10, Table 2)

The Board finds that a dividend policy of 25% of annual net income is most supportive of NLH's stated objective of moving toward a capital structure of 80/20 within a reasonable time frame. For purposes of determining the 2004 test year revenue requirement, NLH will be ordered to adjust the forecast dividend payment in 2004 to 25% of net income from the proposed 75% payout, incorporating the impact of this adjustment on the forecast ROE and interest expense.

3. NLH as an Investor Owned Utility

In its 2001 general rate hearing NLH submitted it operated as an investor owned utility and should be treated as such for purposes of regulation. Order No. P. U. 7(2002-2003) determined:

> *"The Board finds no statutory basis for treating NLH as an investor owned utility. The Board concludes approval in principle of NLH's request to be treated as an investor owned utility is not justified based on its current operating characteristics. The Board believes NLH's request is premature in the absence of a sound plan by NLH of how it will achieve financial targets similar to an investor owned utility and what impact this will have on its customers. The Board notes that NLH's debt is guaranteed by Government and this ensures NLH's continued access to the capital markets of the world."*

Although the question concerning NLH as an investor owned utility changed somewhat in this proceeding, evidence once again centered on this issue as one of the key considerations in determining an appropriate return on equity for NLH. NLH submitted that it is entitled to the opportunity to earn a just and reasonable return reflecting the level of business and financial risks NLH faces, which it argued, have been acknowledged to be no less than that of the other utility operating in the Province, NP, an investor owned utility. (Final Argument, NLH, pg. 48/25-28) NLH argued, however, that the distinction of whether a utility is Crown owned or investor owned is meaningless since ROE should be the same for either type of utility having similar capital structure and similar risks. (Transcript, Jan. 16, 2004, pg. 41/5-11) Both Mr. Wells and Mr. Roberts clarified that NLH's position with respect to being treated as an investor owned utility relates to the assessment of NLH's rate of return based on the risks of the equity holder. (Transcript, Oct. 9, 2003, pg. 22/1-13; Oct. 16, 2003, pg. 18/17-22)

All intervenors presented evidence on this issue and unanimously agreed no change in the Board's findings in Order No. P. U. 7(2002-2003) was warranted by the current circumstances surrounding NLH.

The CA submitted NLH has failed to demonstrate since Order No. P. U. 7(2002-2003) that there has been significant change in its key operating characteristics, and noted that in fact negative change has occurred regarding NLH's capital structure. The CA acknowledged that without the cooperation of its shareholder, the Provincial Government, NLH cannot be faulted for not meeting the standards required by the Board to qualify as an investor owned utility. The CA concluded NLH should not be treated by the Board as an investor owned utility. (Final Submission, CA, pg. 9; Transcript, Jan. 16, 2004, pgs. 54/20-25; 55/1-4)

NP noted NLH has the burden of proving that it is entitled to be treated as an investor owned utility and hence entitled to an investor owned utility ROE. NP submitted that NLH must demonstrate it has a sound plan to achieve the financial and operating characteristics appropriate for NLH as a Crown owned utility. NP suggested that to date NLH has made little or no progress in this area and has actually moved backwards on the key issue of capital structure. NP argued NLH has not proven it is entitled to be treated as an investor owned utility and has effectively abandoned that objective. NP concluded NLH should be regulated as a Crown owned utility, not an investor owned utility. (Brief of Argument, NP, pgs. C-8/4-25; C-17/8-18)

The IC argued NLH presented similar attributes in this Application to those denoted in 2001 in comparing itself to an investor owned utility. The IC concurred generally with the CA and NP that there is no evidence which has satisfied the conditions laid down by the Board for treatment of NLH as an investor owned utility. (Written Argument, IC, pg. 8)

Dr. Waverman indicated NLH is a Crown corporation and raises capital by issuing debt, supported by the unconditional guarantee of the Province as to principal, interest, and where applicable, sinking fund payments. Given these facts Dr. Waverman concluded that NLH's consideration of its optimal capital structure, Provincial dividend payment policy, and cost of equity will be different from those of an investor owned utility. (Pre-filed Evidence, Dr. L. Waverman, pg. 9/1-5)

The Board agrees with the conclusions of the intervenors that NLH has demonstrated little progress since the issuance of Order No. P. U. 7(2002-2003) to warrant treatment as an investor owned utility. In Order No. P. U. 7(2002-2003) the Board outlined a number of enabling requirements toward its treatment of NLH as an investor owned utility. These included: (i) targeted financial plans; (ii) a supportive dividend policy; and (iii) an appropriate capital structure. These requirements have not been met and in actual fact the latter two have deteriorated since NLH's last general rate application when compared to an investor owned utility. NLH's future dividend policy remains in doubt and hence NLH has submitted no financial plan to date toward achieving a self-supporting capital structure consistent with an investor owned utility. In addition, Mr. Wells acknowledged no plan has been developed by NLH to evaluate the impact on customers of moving to what he describes as *"akin"* to an investor owned utility. (Transcript, Oct. 7, 2003, pg. 156/1-12)

NLH's response to PUB-86 describes the similarities between NLH and an investor owned utility. These similarities referenced an efficient and least cost operation as well as appropriate financial returns and capital structure based on an appropriate dividend payout. As noted by the IC, these characteristics are the same as previously outlined by NLH in its 2001 application. Order No. P. U. 7(2002-2003) noted at the time that at least two of these similarities, i.e. an appropriate debt/equity ratio and dividend payout, were not in keeping with an investor owned utility. Indeed, as evidenced earlier, NLH's capital structure versus an investor owned utility has actually deteriorated as a result of NLH's dividend payment to Government.

The Board also notes that Dr. Waverman confirmed that NLH's dividend policy and debt to equity ratio reflect differences between NLH and an investor owned utility similar to those outlined in 2001. Dr. Waverman further confirmed the unconditional provincial guarantee as another distinct difference between NLH and an investor owned utility. Order No. P. U. 7(2002-2003) notes the provincial guarantee was also among the principal differences outlined by NLH in its 2001 general rate hearing in distinguishing its operations as a Crown corporation from those of an investor owned utility. The other notable differences include the ability of the shareholder, Government, to direct NLH in matters of public policy and the fact that NLH is not subject to corporate income taxes.

The Board concludes there continue to be more differences than similarities between NLH and an investor owned utility. These differences remain exemplified in NLH's operations in respect of the provincial guarantee, capital structure, dividend policy, public policy direction and tax-exempt status. The Board notes these differences between NLH and an investor owned utility will continue to apply with no evidence of change occurring in the foreseeable future.

The Board does not accept the argument presented in this Application that nonetheless NLH remains entitled to an ROE as if it were investor owned based on the risks of the equity holder, Government. If NLH expects to be treated as an investor owned utility in one aspect of its operation then it must reflect this expectation in other aspects of its operations, including capital structure backed up by an appropriate dividend policy. As outlined in Order No. P. U. 7(2002-2003), NLH has the responsibility to demonstrate how it plans to achieve operating characteristics equivalent to an investor owned utility and what impact this will have on its customers. The Board is not persuaded that circumstances have changed sufficiently in this Application to warrant any different treatment of NLH as an investor owned utility than that determined in Order No. P. U. 7(2002-2003).

The Board finds insufficient justification at this time to warrant treatment of NLH comparable to an investor owned utility for purposes of setting its financial targets. The onus is on NLH in future applications to clearly demonstrate through its operations and financial plans how it will achieve financial targets similar to an investor owned utility and what impacts this will have on its customers. The Board will continue to recognize NLH as a Crown owned utility afforded the benefit of a debt guarantee provided by its shareholder, Government, which sustains NLH's access to the capital markets.

4. Return on Equity

NLH's proposed revenue requirement for the 2004 test year comprises a return on equity (ROE) of 9.75%, amounting to $18,674,000. (Revised Evidence, J.C. Roberts, Schedule II, Oct. 31, 2003) Mr. Wells explained that, in order to expedite this issue, NLH is proposing the same ROE of 9.75% that was recently approved for NP. (Revised Evidence, W. E. Wells, Aug. 12, 2003, pg. 22/16-22; PUB-85, pg. 1/6-9)

NLH's regulated return on average common equity for the period 2000-2004 is as follows:

Regulated Return on Average Common Equity					
	2000	**2001**	**2002**	**2003(F)**	**2004(F)**
Regulated Return on Common Equity (%)	2.10	4.44	4.03	-3.77	9.56

F – forecast
Source: (Grant Thornton's 2003 General Rate Hearing Report, pg. 14/15-28)

It is noteworthy that NLH's actual ROE for 2002 was in fact higher at 4.03% than the 3% ROE which was accepted by the Board in Order No. P. U. 7(2002-2003). The 2003 forecast shows an ROE of -3.77% primarily attributable to Granite Canal and power purchase contracts coming onstream. NLH's requested 9.75% ROE for the 2004 test year has been reduced to 9.56% as shown above to enable comparison with prior years. This calculation is outlined in NP-5 and primarily reflects the fact that NLH does not earn an ROE from rural assets.

The evidence summarizing the position of the cost of capital experts concerning ROE is outlined on the following page.

COST OF CAPITAL - EXPERT EVIDENCE			
	Ms. McShane	**Dr. Kalymon**	**Dr. Waverman**
Business Risk	- NLH faces no less business risk than the typical investor owned electric utility in Canada, including NP. (Pre-filed Evidence, pg. 13/9-11)	- Business risk of NLH has not changed materially from the last hearing and is similar to other electrical utilities such as NP (Pre-filed Evidence, pg. 10/21-24)	- NLH faces many of the same business risks (i.e., weather, the economy, the price of inputs, etc.) that confront IOUs. (Pre-filed Evidence, pg. 9/23-24)
Financial Risk	- Debt guarantee transfers to the guarantor (in this case the Province) much of the financial risk associated with the debt to NLH, thus permitting it to operate with a higher debt ratio than a stand-alone utility. Assumes a stand-alone capital structure (i.e. no debt guarantee) of 60/40 in determining ROE. (Pre-filed Evidence, pgs. 14/1-9; 21/15)	- Capital structure risk of NLH continues to be very high but with Provincial guarantee the financial risk is limited to Provincial credit level. Deemed capital structure of 60/40 used to calculate ROE. (Pre-filed Evidence, pg. 13/6-13)	- NLH does not have common stock equity investors and does not face the risk with these investors borne by IOUs. (Pre-filed Evidence, pg. 9/24-29) - Other factors that tend to lower the costs and risks for NLH include the debt guarantee, tax-exempt status and Crown corporation (Pre filed Evidence, pgs. 11/16-25; 12/1-6)
Total Risk	- Total risk of NLH comparable to NP. (Transcript Dec. 3, 2003, pg. 124/1-6)	- Overall risk of NLH comparable to average utility and below NP. (Pre-filed Evidence, pg. 13/11-13)	- Debt investors in NLH bear less risk than common shareholders in IOUs meaning that WACC which utilizes an IOU proxy group's costs of common equity for NLH's retained earnings would result in rates for NLH's customers that contain capital charges in excess of NLH's costs. (Pre-filed Evidence, pg. 12/7-12)
Debt Guarantee Fee	- Total compensation to the debt guarantor should be no greater than if NLH was financed on a stand-alone basis. (Pre-filed Evidence, pg. 21/6-7)	- The guarantee fee of the Province is not excessive if recognition is given to the fact that a portion of the fee is providing compensation for the implicit equity investment. (Pre-filed Evidence, pg. 16/11-13)	- 1% guarantee fee can be recognized either as an interest expense (preferred by Dr. Waverman) or part of the opportunity cost of capital but not both. (Pre-filed Evidence, pg. 15/16-23; Transcript, Jan. 16, 2004, pgs. 179/1-25; 180/1-19)
Shareholder's Equity	- The equity funds reinvested in NLH by the Province have an opportunity cost. The Province (and taxpayers as shareholders) should expect to earn a return on the equity funds reinvested in NLH equivalent to the return they could have earned on an alternative investment of comparable risk. (Pre-filed Evidence, pg. 24/21-25)	- Given a deemed 40% equity, the Province is entitled to earn an ROE similar to that of other companies of similar risk. (Pre-filed Evidence, pg. 14/8-10)	- NLH, a Crown corporation, has no common stock equity and the Province's citizens are its ultimate "owners". Compensating these owners simply means raising through regulated rates funds sufficient to maintain operations and satisfy:(1) the interest obligations on the outstanding guaranteed debt; and (2) the opportunity cost of the Province's citizens (as represented by the marginal cost of the Provincial guaranteed debt) for the shareholder's equity portion of the capital structure. (Pre-filed Evidence, pg. 5/13-21)
ROE Methodology	- 3 standard regulatory tests: 1) Equity Risk Premium 2) Discounted Cash Flow 3) Comparable Earnings. (Pre-filed Evidence, pg. 25/1-7)	- 3 standard regulatory tests: 1) risk premium method; 2) adjusted comparable earnings 3) discounted cash flow (Pre-filed Evidence, pg. 18/7-12)	- Focus on cost standard where comparison of NLH and IOU capital costs are irrelevant. (Pre-filed Evidence, pgs.7/28-29; 8/1-2) - Uses existing capital structure reflecting actual balance of debt to retained earnings (Pre-filed Evidence, pg. 8/23-25) - ROE equals embedded cost of NLH's outstanding provincial guaranteed debt (if not allowed as interest expense) plus the opportunity cost of shareholder's equity (retained earnings) at the marginal cost of new provincially guaranteed debt. (Pre-filed Evidence, pg. 3/6-15)
Recommended ROE	- **11.0 to 11.25%** (Transcript, Dec. 3, 2003, pg. 45/2-3)	- **8.5 to 9.0%** (Transcript, Dec. 4, 2003, pgs. 8-9)	- Long-term opportunity cost of new debt to NLH. Dr. Kalymon indicated as **5.83%**; accepted by Dr. Waverman. (Transcript, Dec. 4, 2003, pgs. 3/18-19; 58/14-21)

NLH explained that its request for a 3% ROE in its 2001 general rate hearing was intended to apply only for a limited time to address what was thought to be a temporary issue of adjusting base rates to reflect higher fuel costs. NLH indicated it cannot compromise the utility's financial integrity by continuing at a rate of return that was recognized by all to be well below market and well below what NLH is entitled to earn under current legislative provisions. (Final Argument, NLH, pg. 47/13-20) NLH argued that following a review of the relevant risks, NLH faces no less business risk than the typical investor owned utility in Canada, and noted Dr. Kalymon reached a similar conclusion. NLH again reiterated Ms. McShane's evidence that, in light of the sensitivity of the ROE to the capital structure, the debt cost and the guarantee fee, the equity return for NLH should be set at a level no less than that applicable to an average risk Canadian utility. In order to expedite resolution of ROE in this application, NLH requested a return on common equity of 9.75%, the same as recently allowed by the Board in Order No. P. U. 19(2003) for NP, an investor owned utility.

While not taking issue with Government's policy to subsidize rural rates, the CA argued that Government, as shareholder of NLH, should not receive a 9.75% ($19,000,000) ROE at the same time as ratepayers are expected to pay for the $41,000,000 rural deficit. The CA submitted that Section 3(a)(iii) of the *EPCA* creates a redundancy in allowing a utility to charge electricity rates sufficient to enable it to earn a return for the purpose of maintaining a sound credit rating when, in actual fact, NLH's sound credit rating is established by other means, namely the Government guarantee and NLH's consolidated financial parameters. The CA also submitted that when assessing NLH's appropriate range of ROE the Board should consider the fact that NLH's shareholder, Government, is entitled to collect a 1% guarantee fee amounting in the 2004 test year to $14,500,000. The CA noted this combination of the revenue required for the guarantee fee of $14,500,000 plus the 9.75% ROE of $19,000,000 equals an estimated $34,000,000, or 16% of NLH's total equity of $206,000,000. While not the total return per se, the CA claimed it provides some perspective on the level of return being received by the shareholder. The CA concluded there is no justification in the evidence for the Board to increase NLH's 3% ROE allowed in Order No. P. U. 7(2002-2003). Alternatively, the CA indicated if the Board decides NLH should be treated as an investor owned utility, then Dr. Waverman's approach should be accepted or, if not, Dr. Kalymon's evidence is preferred over that of Ms. McShane. (Final Submission, CA, pgs. 9-16)

NP submitted NLH maintains a sound credit rating and has appropriate interest coverage for its capital borrowing requirements. NP observed the Board should consider the degree to which it is appropriate to reduce NLH's ROE below normal returns in order to incent NLH to develop and implement a sound financial plan in the long term interests of the consumers of the province. NP suggested NLH will have time to develop a sound financial plan before its next general rate application. NP argued the Board will have to exercise its judgement 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 NLH's operations. NP concluded this is not simply a matter that can be determined on a mathematical basis from the evidence. (Brief of Argument, NP, pgs. C-18 to C-19)

The IC argued it is inappropriate for the Board to grant NLH a rate of return comparable to an investor owned utility. The IC submitted the intent of the legislation is served by allowing sufficient interest coverage to ensure NLH's debt is self-supporting and that is the appropriate test to apply to a government owned utility which does not operate like an investor owned utility. The IC explained that NLH rationalized the 3% rate of return requested in 2001 in terms of limiting rate shock arising from increases in the range of 17% and suggested a similar finding is justified today when increases range from 22-29% for the IC. The IC observed the only real market the Board need consider relative to NLH's credit rating is the debt market since NLH issues no equity. Given that NLH's debt continues to be self-supporting and access to the capital markets is ensured through the provincial guarantee, the IC concluded it is difficult to justify anything more than the existing 3% ROE, particularly in light of the legislative directive to seek lowest cost electricity. The IC recommended the 3% ROE remain in place. Should the Board decide to evaluate a *"market risk"* for NLH as if it were a traded company, the IC maintained NLH's relative operating risks are minimal and manageable since NLH is a non-taxable entity and is afforded various protections through the RSP. The IC further indicated NLH's financial risk is essentially non-existent given the Government guarantee and the lack of competition. The IC concluded that appropriate adjustments to ROE should be made to reflect, among other things, NLH's lower risks and the non-taxability of the shareholder. (Written Argument, IC, pgs. 7-11)

In summarizing the evidence Board Hearing Counsel noted all three experts agreed that setting a fair return was a question of determining NLH's cost of capital. Board Hearing Counsel observed that while all three experts agreed that NLH should be compensated for its interest obligations on embedded debt and the opportunity cost of its retained earnings, there was a difference in opinion concerning how to measure the opportunity cost of those retained earnings. Board Hearing Counsel noted Ms. McShane and Dr. Kalymon both submitted the opportunity cost of the retained earnings should equal what a common stock investor would earn in a similar risk enterprise, while Dr. Waverman suggested it equals the cost to NLH of issuing new debt. Board Hearing Counsel commented that the methodology used to determine NLH's cost of capital must ultimately have a rational basis and, to this end, the Board must be satisfied that the approach as suggested by an expert is based on accepted and conceptually correct principles of financial theory and utility rate making. Board Hearing Counsel concluded that if the Board finds it is not appropriate to treat NLH as an investor owned utility, it may wish to consider employing Dr. Waverman's approach as a suitable interim measure for determining the cost of capital. Board Hearing Counsel further concluded this methodology can be revisited if and when NLH demonstrates to the satisfaction of the Board it can be treated as an investor owned utility. (Final Submission, Board Hearing Counsel, pgs. 5/4-5; 6/12-23; 7/1-6)

None of the options presented by the cost of capital experts were the recommended first choice of any of the parties. While NLH essentially adopted Ms. McShane's methodology into evidence, its proposal of 9.75% was considerably below the 11-11.25% recommended by Ms. McShane. For purposes of expediting the decision in this Application, NLH proposed an ROE equivalent to that recently approved for NP in Order No. P. U. 19(2003). Both the CA and the IC recommended no change in NLH's existing 3% ROE, with the CA arguing in favour of Dr. Waverman's approach as a preferred second choice over that of his own expert, Dr. Kalymon. NP indicated the Board should exercise its regulatory judgment in setting an appropriate ROE for NLH. Board Hearing Counsel suggested Dr. Waverman's evidence may be considered by the

Board as a possible interim determination pending NLH justifying an ROE equivalent to that of an investor owned utility.

As previously determined, NLH has not proven it should be treated as an investor owned utility and the Board finds it is not entitled to an ROE comparable to an investor owned utility. The Board does not concur it should assess ROE for NLH as an investor owned utility when it finds that other appropriate measures of an investor owned utility are not being observed by NLH. For a utility to be treated as an investor owned utility for the purposes of ROE, its operating and financial practices should be appropriately established, properly integrated and consistently applied similar to an investor owned utility. The Board does not accept as sound regulatory practice allowing a utility to invoke one investor owned measure (i.e. market driven ROE) and then allowing it to operate differently with respect to a related measure (i.e. capital structure). As noted previously, the Board believes moving to a self-supporting capital structure is in the best interest of NLH and its ratepayers in contributing to fair and stable electrical rates.

NLH further argued ROE should be determined in relation to utilities of similar capital structure and similar risks. The Board acknowledges all three cost of capital experts agreed that both NLH and NP are exposed to some of the same business risks. In addition, all three experts viewed the financial viability of NLH to be currently dependent on the Government guarantee. Assuming a 60/40 capital structure for NLH, Ms. McShane concluded the total risk of NLH was comparable to NP and Dr. Kalymon concluded that it was below that of NP. Dr. Waverman argued NLH does not have common equity stock, and other factors such as NLH's debt guarantee and tax-exempt status tended to lower financial risks for NLH compared to an investor owned utility. The IC cited some of these same reasons in arguing that NLH's operating and financial risk was nominal in comparison to an investor owned utility.

The Board agrees that NLH must operate in a financially self-supporting manner with regard to revenues and expenses so as to cover its interest costs and not impair the bond rating of the Province, thereby impairing its own bond rating. The Board also concurs with the view that NLH and NP have similar business risk but is not persuaded that NLH's total risk is comparable given NLH's reliance on the Government guarantee in sustaining its creditworthiness. The Board notes this dependence on the provincial guarantee has become even more acute since Order No. P. U. 7(2002-2003) in light of NLH's deteriorating capital structure. No specific adjustment to NP's 9.75% equivalent ROE was presented to the Board to account for diminished total risk.

Both the CA and NP referred to the need for the Board to take into account social policy benefits and the guarantee fee in considering the financial return to the shareholder, Government. Indeed the unconditional provincial guarantee and the ability of Government to direct NLH in matters of public policy were previously identified as two distinct differences between NLH and an investor owned utility. The CA observed that the $41,000,000 rural deficit, the $14,500,000 debt guarantee fee and the $19,000,000 (9.75% ROE) are all revenues that arguably link to NLH's shareholder, Government, that NLH is seeking to collect from ratepayers in this Application. NP argued the guarantee fee and social policy benefits are directed by Government through NLH's operations and the Board should exercise regulatory judgment on those items in setting an appropriate ROE for NLH.

NLH observed the issue of the impact of the rural deficit on ROE was not covered by witnesses in this hearing but was referenced in its 2001 general rate hearing by various witnesses who expressed the view at that time that the rural deficit and social policy should not influence the ROE although it may impact other things such as rate design issues. NLH maintained the issue of the guarantee fee has been covered before and found by the Board to be a fee for service and should not affect ROE. (Transcript, Jan. 16, 2004, pgs. 41/17-25; 42/1-4)

The Board has already determined the guarantee fee to be a legitimate expense of NLH as requested in its Application. The Board accepts Dr. Waverman's evidence that the guarantee fee can either be recognized as an interest expense or part of the opportunity cost of capital, but not both, since it would be double counting with ratepayers paying the shareholder twice for the same risk.

NLH argued there should be no difference between a Crown owned utility and an investor owned utility of similar risk in determining a fair ROE. At the same time, NLH maintained that two of the elements, i.e. debt guarantee and social policy considerations, which make NLH distinctive from an investor owned utility should not influence ROE. The Board notes that, while the shareholders of an investor owned utility may be entitled to an ROE based on a comparison to similar risk utilities, its revenues do not normally incorporate a guarantee fee and social policy benefits. The Board agrees with NLH that there was insufficient evidence to specifically show how the Board should consider an appropriate ROE for NLH in light of the social policy benefits derived by its shareholder, Government. The Board notes Government has directed the Board under Section 5.1 of the *EPCA* regarding the rural deficit. This issue is more specifically addressed in Part II - Section VIII of this Decision and Order.

In final argument (pg. 10) the IC referred to the tax rate of 30.58% that another investor would have to pay on dividends. Additional details on this issue were outlined in responses to IC-348 to IC-350. Given that Government, as sole shareholder of NLH, is a non-taxable entity, the IC reasoned the ROE can be reduced by an equal percentage. The Board is not persuaded to make such an adjustment based on this evidence.

In summary, the Board concludes NLH currently maintains financial characteristics inconsistent with those of an investor owned utility and, while its business risk is similar to that of NP, NLH's total risk is lower due to the role played by the provincial debt guarantee. The Board determines that NLH is not entitled to a 9.75% ROE equal to that approved in Order No. P. U. 19(2003) for NP, an investor owned utility. Furthermore, based on the evidence, the Board is not able to assess how, if at all, NLH's ROE should be impacted by social policy benefits directed by its shareholder, Government, and/or the non-taxable status of NLH and its shareholder. The Board is of the view that if intervenors wish these issues to be addressed in future then appropriate evidence be presented to allow the Board to reach a specific determination.

In denying NLH's request for a 9.75% ROE similar to NP, an investor owned utility, the Board accepts NLH's argument that the 3% ROE accepted by the Board in Order No. P. U. 7(2002-2003) for the 2002 test year was an interim proposal until NLH's next general rate application. The Board acknowledged at the time that consideration of a more normal return would be subject to a future request by NLH. The Board does not agree with the position of the CA and the IC that there is no justification for an increased ROE. The Board finds no reasoned foundation in utility ratemaking to support the 3% ROE and believes this level would not constitute a just and reasonable return for NLH. It may also prove a disincentive for NLH to move toward an 80/20 self-supporting capital structure.

The Board finds that the appropriate ROE for NLH is greater than 3% and lower than 9.75%. The Board concurs with NP that the determination of an appropriate ROE for NLH in the circumstances is not a matter to be determined on a mathematical basis from the evidence. Hence, the Board will exercise its regulatory judgment in setting an appropriate ROE.

The Board in the first instance refers to its regulatory framework as set out earlier in this Decision. In the Stated Case (para. 144), then Mr. Justice Green concluded that the Board has discretion to choose the best approach to setting rates as long as it observes the legislation and sound utility practice. Mr. Justice Green remarked:

> *"It must always be remembered that, as has been emphasized throughout this opinion, the Board is charged with balancing the competing interests of the utility and the consumers of the service it provides. Neither set of interests can be emphasized in complete disregard of the interests of the other. Thus, in choosing to exercise a particular power within the Board's jurisdiction, the Board must always be mindful of whether, in so acting, it will be furthering the objectives and practices of the legislation and doing so in a manner that amounts to a reasonable balance between the competing interests involved."*

In balancing the competing interests of the consumer and the utility the Board has determined that an appropriate ROE for NLH is greater than 3% and less than 9.75%. Within these parameters the Board was presented with no evidence to enable it to reach a specific determination, other than Dr. Waverman's approach equating NLH's ROE to its cost of issuing new debt.

Dr. Waverman concluded a fundamental tenet of utility ratemaking is that prices are based on costs (operating plus reasonable profit). Dr. Waverman submitted that NLH is a Crown corporation which raises debt capital supported by the unconditional guarantee of the Province. Given these facts Dr. Waverman noted NLH's consideration of its optimal capital structure, provincial dividend policy and *"cost of equity"* will be different from that of an investor owned utility. As a Crown corporation, Dr. Waverman observed NLH should strive to provide efficient, safe, adequate and reliable service to its customers, while earning returns that allow NLH to be self-supporting. For purposes of this rate proceeding Dr. Waverman stated the Board should: (1) use a capital structure that reflects NLH's balance of debt and retained earnings; (2) allow the utility to recover its embedded cost of debt; and (3) consider allowing an opportunity cost of capital on NLH's retained earnings that is equal to NLH's opportunity cost of debt. (Pre-filed Evidence, Dr. L. Waverman, pgs. 3/17; 8/23-27; 9/1-5; 18-21)

Dr. Waverman's approach is premised on the evidence that NLH has no common stock equity and the Province's citizens are its ultimate *"owners"*. For the shareholder's equity (retained earnings) Dr. Waverman submitted NLH need only compute the opportunity cost of its ultimate public *"owners"* - the people of the Province of Newfoundland and Labrador. (Pre-filed Evidence, Dr. L. Waverman, pg. 7/15/21) Ms. McShane and Dr. Kalymon on the other hand suggested the costs of NLH's retained earnings should be comparable to an investor owned utility of similar risk. This key point of departure between the cost of capital experts involves an important regulatory question for the Board. What should customers or ratepayers of a Crown owned utility pay for electricity to compensate the utility and its public *"owners"* for a return on their equity investment (ROE)? This question becomes further complicated by the fact that some of the same owners, i.e. taxpayers, are being advantaged by social policy benefits for which they would otherwise have to pay outside of electrical rates. The answer lies in sharing costs appropriately among ratepayers, taxpayers, and public "*owners*" and deciding whether or not a government-owned utility in circumstances similar to NLH is entitled to recover all costs from ratepayers, including an ROE comparable to that of an investor owned utility of similar risk. The Board has determined that NLH has lower risk than NP and is not considered equivalent to an investor owned utility for purposes of determining ROE in this Application. In regulating NLH at this stage, the Board will concentrate on providing compensation for NLH's debt guarantee, supporting a strengthening of NLH's financial position and providing a fair ROE for NLH. Under these circumstances, an ROE for NLH linked to the cost of public debt may be considered a fair and reasonable return to be paid by customers and ratepayers of a Crown owned utility to compensate its public *"owners"* for supplying electricity.

Regarding the allowed cost for the shareholder's equity portion of NLH's capital structure, Dr. Waverman noted that Ms. McShane stated that the long-term opportunity cost of new debt to NLH is about 6.75%. He also suggested that a review of the yields to maturity of other electric utility Crown corporation debt in Canada with bond ratings comparable to NLH would also be useful. Dr. Kalymon also discussed the cost of debt to NLH in his pre-filed evidence (pg. 61) and, during direct testimony on December 4, 2003, updated the trading yields of long-term bonds for the Province from 6.03% as of August 14 to a current number of about 5.83%. Dr. Kalymon stated *"Given the provincial guarantee, that basically implies that that's the effective borrowing cost for this company for long-term funds."* (Transcript, Dec. 4, 2003, pg. 3/18-22) Dr. Waverman confirmed 5.83% as his understanding of the current marginal opportunity cost of debt. (Transcript, Dec. 4, 2003, pg. 58/14-21) Based on the evidence the Board concludes that 5.83% is the long-term marginal cost of new debt to NLH and, hence, represents a fair and reasonable return for the shareholder's equity portion of NLH.

In examining this option from a regulatory perspective the Board notes that,

- By virtue of the Government guarantee, NLH will continue to maintain a sound credit rating and will have access to the capital markets for its borrowing, including new debt;
- An ROE of 5.83% supports regulatory principles of rate stability and predictability and moderates against rate shock; and
- An ROE of 5.83% may also provide an incentive for NLH, in concert with its shareholder, Government, to put in place the required measures to achieve NLH's targeted goals of an 80/20 capital structure and an appropriate ROE comparable to utilities of similar risk.

Based on the foregoing considerations, the Board accepts 5.83% as an appropriate end result in determining NLH's ROE in the current circumstances. The Board is of the view that Dr. Waverman's approach will allow NLH to fully recover its costs, including a fair ROE, in the context of the finding that NLH should not be treated as an investor owned utility. In this particular Application, NLH is limited to an ROE equal to the Province's marginal cost of debt calculated using its actual capital structure. The Board believes a 5.83% ROE equal to the Province's marginal cost of debt can be used as a suitable interim measure to determine NLH's cost of capital. The Board concludes this finding is in keeping with sound cost-based ratemaking principles and is consistent with findings of the Board in this Decision and Order. The Board concludes that its finding of a 5.83% ROE for NLH is fair, just and reasonable from the perspective of both the consumer and the utility in the current circumstances. The Board confirms that any change in this determination will depend on NLH justifying to the Board in a subsequent application that it should be treated comparably to an investor owned utility or providing other suitable rationale supporting an increased ROE.

The Board concludes that an appropriate ROE for NLH for the purposes of determining the weighted average cost of capital for the 2004 test year is 5.83%.

II. FORECASTING: PRODUCTION AND FUEL COSTS

1. Introduction

Section 3 (a)(ii) of the *EPCA* requires the Board to establish rates, wherever practicable, based on forecast costs for the supply of power for one or more years. In this Application NLH has based its revenue requirement on its forecast costs for the 2004 test year.

Accurate forecasting plays a key role in establishing test year costs. Forecasts of hydraulic and thermal production, the fuel conversion factor for No. 6 fuel at Holyrood, and the price of No. 6 and other fuels contribute significantly to the costs of power generation to be recovered in rates.

2. Production Forecasts

i) Test Year Hydraulic Production

The issue of the appropriate hydraulic data stream to be used by NLH in forecasting test year hydraulic production was considered at NLH's 2001 general rate application. In Order No. P. U. 7(2002-2003) the Board determined:

> *"NLH will be required to use the 30 year average annual hydraulic production of 4,425 GWh as the basis for the test year hydraulic forecast. The Board will also require NLH to commission an independent study into its current forecasting methodology to address the concerns raised in this hearing, including the issues of data reliability, long term trends and climate change. The terms of reference for this study should be filed with the Board in advance. The results of this study will be required to be filed with the Board as part of NLH's next rate application."*

In its Application NLH forecast the hydraulic production for the 2004 test year based on the 30-year average for water inflows for the existing plants and from a power and energy analysis for Granite Canal. The total forecast hydraulic production is 4,582.2 GWh, consisting of 4,358.2 GWh from existing plants and 224.0 GWh from Granite Canal. This compares to a 2002 test year hydraulic production of 4,425.0 GWh. (NP-64; Grant Thornton 2003 General Rate Hearing Report, pg. 25)

As directed by Order No. P. U. 7(2002-2003) NLH submitted with its Application a report <u>Island Hydrology Review Final Report</u>, completed by SGE Acres. (Exhibit JRH-2) Ms. S. Richter of SGE Acres also testified during the hearing with respect to the report. NLH has accepted the recommendations of this report, which are as follows:

1. The longest reliable reference inflow sequence (period of record) should be used for all NLH's operation, planning and rate setting purposes.
2. The inflow sequences presently used by NLH should be corrected to ensure internal consistency.
3. The same estimate of average annual energy from hydroelectric resources should be used for operations, planning and rate setting.

4. Computer simulation of the operation of the hydroelectric system using the reference inflow sequences should be used to estimate energy production and spill from NLH's hydraulic resources. NLH should review its in-house models and other models available and select one for these purposes.
5. NLH should continue to use its present inflow sequences and methodology for energy estimates until such time that the ratification of inflow sequences and selection of a computer model has occurred. The present records, even with minor inconsistencies, give better estimates of expected flows than shorter records.

NLH indicated that it will correct the internal inconsistencies with the Bay d'Espoir record and will also investigate possible simulation models so that, if approved by the Board, the results of the simulation will be available to be used by NLH as the hydraulic production forecast in subsequent rate applications. (Pre-filed Evidence, J. R. Haynes, pg. 29/20-24)

In final argument NLH submitted that, based on the evidence, the Board should direct NLH to file its next general rate application utilizing the full historic record available to determine the appropriate hydrological production record. NLH also stated that it is prepared to file with the Board the results of the SGE Acres review with respect to the internal inconsistencies and to update the Board on the final selection of the computer model. (Final Argument, NLH, pg. 17)

The Mediation Report (Appendix H) presented the following position on behalf of the parties:

> *"r. The appropriate hydraulic data stream for both hydraulic production projections and RSP calculations is long term. The Parties agree that Hydro has properly filed its case using the 30-year record at this time. The Board may consider using the full historic hydraulic data flow record in Hydro's next GRA after NLH addresses discrepancies identified in the Acres Island Study and Parties have had the opportunity to comment thereon."*

In final argument NP submitted that the 30-year record should continue to be used as the appropriate hydraulic data stream for both hydraulic production projections and RSP calculations. NP also submitted that the analysis in support of using a longer-term average for forecasting is not complete and that NLH should be requested to file the analysis for consideration upon completion. NP recommended that the Board not make any determination as to the appropriate period of record for use in determining the average annual energy for future applications until NLH has completed the required analysis and presented the results for review at a public hearing. (Brief of Argument, NP, pgs. B8; B9)

The IC argued that the appropriate process would be for NLH to file its full historic hydraulic data flow record with the Board and provide copies to the other parties at such time as the discrepancies identified in the Acres Island Study have been addressed and rectified. The parties should be provided with the opportunity to make submissions to the Board as to the acceptability of NLH's proposal at its next general rate application. (Written Argument, IC, pgs. 13-14)

The CA stated that, pursuant to the terms of the mediation agreement, the Board is free to direct NLH to use the full historic hydraulic data flow record in NLH's next general rate application. (Final Submission, CA, pg. 35)

In oral argument NLH submitted that, on the basis of the evidence before the Board, there is no reason for the Board to defer a final decision on this issue. (Transcript, Jan. 16, 2004, pgs. 15/20-25; 16/1-7)

The Board accepts the position of the parties as consented to in the Mediation Report with respect to the use of the 30-year rolling average to forecast hydraulic production for the 2004 test year. It is noted that this results in a decrease in fuel expense of approximately $6,000,000 from that which would have been forecast if the full historic record had been used with this Application. (Grant Thornton 2003 General Rate Hearing Report, pg. 52/35-37) Because of the RSP NLH is revenue neutral with respect to the actual time period used for the hydraulic production forecast. However, this lower fuel expense will translate into a lower revenue requirement to be recovered in base rates from NLH's customers as a result of this Application.

The Board has also considered the report of SGE Acres and the testimony of Ms. Richter. In Order No. P. U. 7(2002-2003) the Board expressed concern regarding the reliability of the data series that NLH was using for its forecasting, as well as long-term trends and the impact of climate change. This report has addressed these issues in a comprehensive manner and the Board accepts its recommendations. In particular, with respect to the characteristics of NLH's historic inflow sequences, Ms. Richter testified:

> A. (Ms. Richter) The Hydro records have some problems in regard to internal consistency arising principally from changes in methods of flow derivation and internal water balance accounting. These deficiencies can and should be corrected. Aside from these minor internal inconsistencies, the sequences appear to be free of systematic and random errors.
>
> (Transcript, Oct 28, 2003, pg. 6/4-11)

Ms. Richter stated that, because of the minor nature of these internal inconsistencies, it was recommended that all data continue to be used. (Transcript, Oct. 28, 2003, pg. 7/9-11) The study also confirmed that the data series does not exhibit any definitive recent trends or changes attributable to climate change. A survey of other utilities conducted by SGE Acres also found that most utilities use the longest available hydraulic record to develop estimates of expected production from hydraulic resources.

The Board is satisfied that the concerns raised during NLH's 2001 general rate hearing with respect to the methodology for estimating hydraulic production have been substantially addressed by the SGE Acres report. NLH has confirmed that the work is currently underway by SGE Acres to correct the internal inconsistencies in the data series and that it is in the process of selecting appropriate computer models for simulation as recommended by SGE Acres. NLH should file its next general rate application using the full historic hydraulic data flow record. The parties will then have the opportunity to examine and make submissions to the Board on NLH's efforts to address the outstanding issues identified in the SGE Acres report.

The Board accepts NLH's proposal to use the 30-year average for the estimation of hydraulic production for the 2004 test year, which will result in a total forecast hydraulic production of 4,582.15 GWh.

The Board will direct NLH to file its next general rate application using the full historic hydraulic data flow record with evidence demonstrating how the following outstanding issues have been addressed:

(i) correction of the internal inconsistencies in the data series; and
(ii) selection of an appropriate computer model for simulation.

ii) Test Year Thermal Production

NLH has forecast a total required energy supply for 2004 for the Island Interconnected System of 6,759.8 GWh. (Revised Evidence, J. R. Haynes, Schedule XI, Oct. 31, 2003) This energy supply will be provided from a combination of hydraulic generation and power purchases, with the difference provided by thermal generation at Holyrood, as shown below:

2004 Energy Supply Forecast	
Hydraulic Production	4,582.15 GWh
Energy Purchased	393.98 GWh
Thermal Generation	1,780.61 GWh
Total Energy Supply	**6,756.74 GWh**

(Revised Evidence, J. R. Haynes, Schedule VII, Oct. 31, 2003)

The Board has accepted NLH's proposal for the hydraulic production forecast of 4,582 GWh. No issues were raised by any of the parties with respect to NLH's test year forecasts for energy supply. Based on the evidence the Board will accept NLH's forecast for thermal production for the test year of 1,780.61 GWh, which will be used in conjunction with the fuel conversion factor and the forecast fuel price to determine the No. 6 fuel expense for the 2004 test year revenue requirement.

The Board accepts the 2004 test year forecast of thermal production of 1,780.61 GWh.

3. Holyrood No. 6 Fuel Conversion

The fuel conversion factor, or efficiency factor, is the expected kWh output from burning a barrel of No. 6 fuel at Holyrood (kWh/bbl) which, when applied to the forecast thermal generation, gives the expected barrels of No. 6 fuel required at Holyrood for the test year. The fuel conversion factor directly impacts NLH's test year fuel expense, as well as NLH's earnings and charges to the RSP.

In its 2001 general rate hearing NLH proposed an increase in the fuel conversion factor for No. 6 fuel at Holyrood from 605 kWh/bbl to 610 kWh/bbl. In Order No. P. U. 7(2002-2003) the Board ordered NLH to use a factor of 615 kWh/bbl in setting rates based in its 2002 revenue requirement. In this Application NLH is proposing to increase the conversion factor to 624 kWh/bbl. This increase in conversion factor results in forecast fuel savings in the 2004 test year of $1,200,000. (Pre-filed Evidence, J. R. Haynes, pg. 13/14-16)

According to NLH's response to NP-74 the proposed conversion factor of 624 kWh/bbl is the weighted average conversion factor for the period 1996 to 2002. This period was chosen because in 1995 NLH put in place a controllable losses program at Holyrood designed to assist the operator to optimize unit performance. The following table shows the achieved No. 6 fuel conversion factors for Holyrood since 1996:

Holyrood No. 6 Fuel Conversion Factor 1996 to 2002			
Year	**Net Energy Produced (GWh)**	**No. 6 Fuel Consumed (Barrels)**	**Conversion Factor (kWh/bbl)**
1996	1,403,596	2,297,258	611.0
1997	1,531,301	2,432,538	629.5
1998	1,263,264	2,041,605	618.8
1999	919,802	1,593,932	577.1
2000	970,283	1,591,586	609.6
2001	2,098,490	3,315,853	632.9
2002	2,385,262	3,678,183	648.5
Total	**10,571,998**	**16,950,955**	**623.7**

(NP-74)

In NP-310 NLH updated the No. 6 fuel conversion factor by month to the end of November 2003. The actual year to date conversion factor to the end of November 2003 is 636.3 kWh/bbl. In final argument NLH updated this information, stating that the actual conversion factor for 2003 to the end of December was 634.9 kWh/bbl. The actual average conversion factor for 1996 to 2003 was 625.4 kWh/bbl. (Final Argument, NLH, pg. 18/8-11)

NLH has undertaken a number of operating changes to improve productivity and efficiency with regards to the operation of the Holyrood plant. Because higher unit loadings result in higher efficiencies, initiatives that result in higher unit loadings are targeted while addressing other constraints such as the hydraulic situation, system security and voltage. According to NLH the controllable losses program introduced in 1995 to provide operations personnel with immediate data on plant processes has improved this effort. (Pre-filed Evidence, J. R. Haynes, pg. 12)

In response to IC-252 NLH indicated three specific projects in the last five years that will contribute to higher efficiency of the Holyrood plant. These include: i) Unit No. 3 water lance installation; ii) Unit No. 3 reheater retubing; and iii) continuous emissions monitoring system. The two projects related to Unit No. 3 were completed in 2001 and equate to a plant efficiency improvement of approximately 2 kWh/bbl. The continuous emissions monitoring project came on-line in the fall of 2003 and NLH predicts an increase of 3 kWh/bbl in plant efficiency. NLH stated that the impact of these projects on plant efficiency was considered in proposing the increase from 615 kWh/bbl to 624 kWh/bbl. (NP-267)

NP argued that NLH's proposed conversion factor is conservative and that a higher factor is more appropriate. Based on the expected plant operating conditions for 2004 and the initiatives to improve plant efficiency, NP submitted that a fuel conversion factor of 636 kWh/bbl is more appropriate. According to NP this value is based on the average of the conversion factors achieved for 1997 and 2001 which best approximates the forecast operating conditions for 2004. The average net energy produced in 1997 and 2001 was 1,814.9 GWh with a fuel conversion factor of 631 kWh/bbl. Given the similar operating conditions NP stated that a fuel conversion factor of 631 kWh/bbl would be more appropriate. NP recommended adding 5 kWh/bbl because of the efficiency improvements recently undertaken by NLH, for a proposed conversion factor of 636 kWh/bbl. (Brief of Argument, NP, pgs. B-11 to B-14)

The IC also submitted that the conversion factor proposed by NLH is too low. In final argument the IC stated that the conversion factor of 624 kWh/bbl is a simple mathematical average of actual production and barrels of fuel used since 1996. These numbers already take into account the variety of operating conditions which NLH faces but do not specifically take into account the efficiency improvements undertaken by NLH, and hence, according to the IC, an upward adjustment is required. The IC recommended a conversion factor of 636 kWh/bbl. (Written Argument, IC, pgs. 12-13; 44)

The Board agrees that the fuel conversion factor for forecasting 2004 test year fuel costs should be based on expected operating conditions for 2004. The actual average conversion factor for 1996 to 2003, which was updated by NLH's Counsel during final argument, is 625.4 kWh/bbl, which reflects a range of operating and hydraulic conditions. For the 2004 test year NLH is forecasting a thermal production of 1,780.61 GWh, 17.9% higher than the average production over the 1996-2002 period. Given that higher thermal production results in higher efficiencies (and hence a higher conversion factor), the Board agrees that 625 kWh/bbl appears conservative. As well the continuous emissions monitoring program completed in 2003 is expected to increase the efficiency by 3 kWh/bbl. The Board also notes that the actual conversion factors for the last three years have exceeded 632 kWh/bbl (2001 – 632.9 kWh/bbl; 2002 – 648.5 kWh/bbl; 2003 – 634.9 kWh/bbl). In the Board's opinion, given this recent experience and the fact that NLH has implemented programs to increase the efficiency at Holyrood, the evidence supports a conversion factor of 630 kWh/bbl.

The Board finds that a conversion factor for No. 6 fuel at Holyrood of 630 kWh/bbl is appropriate for the 2004 test year. This conversion factor will also be used in the RSP.

4. Fuel Price Forecasting

NLH uses PIRA Energy Group of New York, an international consultant, to forecast fuel prices for the purposes of determining NLH's fuel expense. PIRA provides a monthly World Oil Market Outlook, which includes any revisions to the short-term forecast and as well provides a quarterly longer-term market price forecast. (Pre-filed Evidence, J. R. Haynes, pg. 23/8-13)

NLH applies to this forecast received from PIRA foreign exchange rates which are calculated based on forecasts of major Canadian banking institutions. At the time of the May 21, 2003 filing the forecast average price for No. 6 fuel for 2004 was $29.20 (Cdn) per barrel based on an exchange rate of $0.66 US/$Cdn. (CA-112) This forecast was updated with the October 31, 2003 revised filing to a weighted average purchase price of $28.95 (Cdn) per barrel. (Revised Evidence, J. R. Haynes, Schedule VII, Oct. 31, 2003) The decrease was attributed to a slight decrease in forecast load, offset somewhat by an increase in the average cost of fuel from $29.42 per barrel to $29.50 per barrel. (Revised Evidence, J. C. Roberts, Schedule II, Oct. 31, 2003, Note 17) The exchange rate forecast was also updated to $0.746 US/$Cdn. (NP-290) This more favourable exchange rate reduced the impact of the increase in fuel prices between the August and October filing.

In Order No. P. U. 7(2002-2003) the Board stated that it is required to set rates based on forecast costs for the test period and that the most prudent course of action was to set fuel prices at or near the price forecast for the test year. No intervenor at the hearing raised the issue of whether a price other than the forecast price for No. 6 fuel as filed by NLH should be used in determining test year fuel costs to be recovered in rates.

As with No. 6 fuel oil, the cost of diesel fuel is determined by applying forecast fuel prices as provided by PIRA to the fuel quantity required. The original forecast weighted average diesel fuel price, including seller's mark-up and delivery costs, was $0.433 per litre which was revised in NLH's October 31 filing to $0.403 per litre. (Revised Evidence, J. C. Roberts, Schedule II, Oct. 31, 2003, Note 18)

The intervenors did not challenge NLH's forecasts for fuel costs or exchange rates and the Board accepts the forecast price for No. 6 and diesel fuel as reasonable.

The Board accepts the 2004 test year forecasts for fuel prices as proposed by NLH in its October 31, 2003 revised filing for determining the 2004 test year fuel costs.

III. REVENUE REQUIREMENT

1. Introduction

NLH requested a revenue requirement of $367,510,000 for the 2004 test year as set out in the Table below. The Board heard evidence on all of the elements contained in NLH's forecast 2004 revenue requirement.

NLH Revenue Requirement			
Description	**2002 Final Test Year Revenue Requirement[1] $(000)'s**	**2002 Actuals[2] $(000)'s**	**2004 Proposed Test Year Revenue Requirement[2] $(000)'s**
Depreciation	31,390	31,302	33,672
Fuel			
No. 6 Fuel	81,237	112,534	84,186
Diesel Fuel	6,508	6,766	6,801
Other Fuels	871	755	757
Rate Stabilization Plan	0	(46,807)	0
Total Fuel	88,616	73,248	91,744
Power Purchased	15,100	15,881	33,594
Other Costs			
Salaries and Fringe Benefits	61,926	64,559	63,242
System Equipment Maintenance	16,763	17,719	17,440
Insurance	977	1,198	2,019
Transportation	1,923	1,979	2,044
Office Supplies Expenses	1,864	1,856	1,913
Building Rentals & Maintenance	626	900	894
Professional Services	4,943	5,318	4,253
Travel	2,375	2,315	2,395
Equipment Rentals	1,558	1,372	1,756
Miscellaneous Expenses	4,398	4,674	4,185
Productivity Allowance	(2,000)	-	-
Loss on Disposal of Capital Assets	890	2,769	1,266
Subtotal	96,243	104,119	101,407
Allocations			
Hydro Capitalized Expense	(5,722)	(8,116)	(5,204)
CF(L)Co.	(1,910)	(2,006)	(1,858)
Non-regulated customer	(2,914)	(2,914)	(2,684)
Total Other Costs	85,697	91,083	91,661
Interest	88,298	88,547	98,165
Return on Equity	7,959	9,742	18,674
Revenue requirement	**317,060**	**309,803**	**367,510**

[1] Pre-filed Evidence, J. C. Roberts, Schedule II, May 21, 2003

[2] Revised Evidence J. C. Roberts, Schedule II, Oct. 31, 2003

2. Depreciation

NLH's depreciation expense in the 2004 test year is forecast to be $33,672,000, an increase of $605,000 over 2003, primarily due to additions to plant in service and the 2004 capital budget as approved by the Board in Order No. P. U. 29(2003). (Revised Evidence, J. C. Roberts, Schedule II, Oct. 31, 2003) Grant Thornton reviewed NLH's forecast depreciation expense for 2003 and 2004 and reported the depreciation expense appeared reasonable and was calculated in accordance with NLH's depreciation policies as approved by the Board in Order No. P. U. 7(2002-2003).

NLH's forecast depreciation expense for 2004 has increased by 4.9% since 1998. However, as a percentage of total assets it has declined from 1.96% in 1998 to 1.74% in 2004. As indicated by Grant Thornton in its report (pg. 34) this is a reflection of the annual capital expenditures incurred in each year.

In its review Grant Thornton noted that actual capital expenditures have been historically lower than budget and suggested that the Board might want to consider a downward adjustment of the depreciation expense to reflect this historic overbudgeting. The percentage variances of actual capital expenditures to budget for 1998 to 2002 are shown below:

Capital Expenditure Variance – 1998 to 2002	
Year	**% Under Budget**
1998	8.73
1999	16.70
2000	11.80
2001	13.15
2002	9.95
Average for the period	**14.44%**

(Grant Thornton 2003 General Rate Hearing Report, pg. 17)

Grant Thornton indicated that, based on its review, NLH is probably underspending by approximately 5%, and that the remaining 9% variance must be due to delays and carryovers.

Both NP and the IC argued that the forecast depreciation expense for the test year should be adjusted downward by the average of 14% for the period. (Brief of Argument, NP, pg. B-2/26-27; Written Argument, IC, pg. 16)

In final argument (pg. 39) NLH pointed out that its performance has been improving with an average underspending of 11.6% for the period from 2000 to 2002. NLH acknowledged that an adjustment for capital budget underspending is appropriate. NLH submitted however that the adjustment should be no more than 4%, which was the adjustment imposed by the Board on NP in 1996 and 1998 for underspending in similar circumstances.

For the purpose of establishing NLH's 2002 revenue requirement Order No. P. U. 7(2002-2003) ordered a reduction of 7.5% in the approved capital budget because of NLH's historic underspending. The Board recognizes that NLH has made progress in reducing variances between budgeted and actual capital expenditures. However, to recognize the fact that there has historically been underspending, the Board finds an adjustment to the 2004 capital budget is warranted for the purposes of determining the 2004 test year revenue requirement. The Board is not persuaded that a reduction of 14% is justified since, as noted by Grant Thornton, a portion of the underspending variance is due to carryovers and delays, which may not be within NLH's control. The Board will order a reduction in the approved 2004 capital budget for rate setting purposes of 5.0%, which is the amount of underspending identified by Grant Thornton. This adjustment also recognizes NLH's improvement in this area since its 2001 general rate application. This downward adjustment will reduce depreciation and interest expense as well as the forecast rate base for the 2004 test year.

Grant Thornton also noted that NLH's forecast capital retirements as a percentage of total assets appeared to be underbudgeted for 2003 and 2004 in comparison to the historic trend. Based on NLH's May filing, this trending is as follows:

Capital Retirements – 1998 to 2004								
	1998	**1999**	**2000**	**2001**	**2002**	**5-Yr Average**	**Forecast 2003**	**Forecast 2004**
Capital Retirements	5,740	6,676	6,330	6,911	7,743	6,680	2,891	2,654
% of Total Assets	0.35%	0.41%	0.38%	0.40%	0.44%	0.39%	0.15%	0.14%

(Grant Thornton 2003 General Rate Hearing Report, pg. 18)

The effect of increasing the 2004 retirements to the level of the five year average of 0.39% would result in a reduction in depreciation expense of approximately $168,000. Grant Thornton contends such an increase in retirements may also impact the forecast loss on disposal of assets. In addition, an increase in capital retirements would impact the forecast rate base for 2004 and consequently the return on rate base included in the revenue requirement. As with capital budget underspending, Grant Thornton suggested that the Board should consider an adjustment to the forecast capital retirements for the 2004 test year based on the historic levels. (Grant Thornton 2003 General Rate Hearing Report, pg. 19)

Mr. Roberts testified that NLH forecasts its known capital retirements associated with budgeted capital projects and that it is difficult to anticipate in any given year the magnitude of other assets that could be taken out of service prior to the end of their expected service life. According to Mr. Roberts the losses on disposal of retired assets would also have to be included in the revenue requirement and would exceed any reduction in depreciation expense and return on rate base that would arise should the amount of capital retirements be increased. (Transcript, Oct. 14, 2003, pgs. 12-13) NLH argued that, for the reasons set out by Mr. Roberts, it is not necessary to adjust the forecast capital retirements used in the determination of the 2004 test year revenue requirement. (Final Argument, NLH, pg. 41/1-3)

NP submitted that the evidence on this issue was unclear. (Brief of Argument, NP, pg. B-3/9) The other intervenors did not raise an issue with this particular expense.

The Board finds that an adjustment to NLH's 2004 revenue requirement to reflect the historic level of its capital retirements is warranted. For this purpose a factor of 0.39%, which is the five year average determined by Grant Thornton, will be used to determine the capital retirements as a percentage of total capital assets. The Board recognizes that there may be a consequential adjustment to the forecast loss on disposal relating to retired assets as well.

The Board accepts NLH's 2004 test year depreciation expense for the purposes of determining the 2004 test year revenue requirement subject to any adjustments arising from this Decision and Order, including:

- **i. a reduction of 5.0% in the approved 2004 capital budget; and**
- **ii. an adjustment to the forecast 2004 capital retirements to 0.39% of its total capital assets.**

3. Fuel Costs

i) Issues Arising from Order No. P. U. 7(2002-2003)

Order No. P. U. 7(2002-2003) directed NLH to file by December 31, 2002 a statement of policies and procedures outlining a coordinated, integrated and strategic approach to fuel purchasing, addressing managerial accountability along with consideration of an oil hedging program and the adequacy of existing storage facilities. The report Fuel Oil Practices Review And Policy was filed with the Board on December 23, 2002 and was also filed with this Application as Exhibit JRH-1. The following summarizes NLH's conclusions for each of these areas.

Oil Hedging Program

NLH retained the services of Risk Advisory, an independent risk management group, to review several aspects of an oil hedging program, including its goals, the type of programs in use, the benefits derived and the implications for the RSP. Risk Advisory recommended that, before proceeding with an oil hedging program, NLH should:

- (i) undertake a review of the added stability such a program would have in addition to the RSP; and
- (ii) if significant advantage was determined, consider a collaborative approach between the regulator and major intervenors to determine if there was consensus on the risk appetite of the ratepayer. (Exhibit JRH-1, pg. 2)

NLH's Oil Hedge Committee, after reviewing the Risk Advisory report, concluded that the potential significant cost in terms of administration, consulting services and regulatory burden associated with the implementation of a program would not be justified by the potential savings from a relatively small decrease in rate volatility. The RSP alone has the single greatest impact in terms of rate stability and predictability.

The findings of the report with respect to an oil hedging program were not challenged by the intervenors.

The Board agrees with the conclusion of Risk Advisory that, all things considered, the RSP alone has the greatest impact on fuel price variances. The Board also agrees with the conclusions reached by NLH's Oil Hedge Committee that there are no significant benefits at this time from further exploration of an oil hedging program.

Fuel Purchasing

NLH normally tenders on a three to five year basis for the supply of heavy fuel for the Holyrood Generating Station. NLH may also buy up to 25% of total supplies on the spot market; however, this option has seldom been used due to the volatility of oil prices on a daily basis.

In 2002 NLH retained United Fuels International to review its fuel specification both technically and contractually. This resulted in changes to the chemical content of the oil, changes in the price setting mechanism and a provision to move to a lower sulphur fuel.

The No. 2 diesel fuel used by NLH in its rural interconnected and isolated systems is tendered for the various locations and may be awarded to several vendors to minimize costs recognizing geographical and shipping economies.

NLH concluded that its fuel purchasing practices are adequate and in the best interest of ratepayers. This conclusion was not challenged by the intervenors. The Board agrees that NLH's current fuel purchasing practices are adequate.

Adequacy of Existing Fuel Storage Capacity at Holyrood

In light of the recommendation of NLH's Oil Hedge Committee that an oil hedging program not be implemented, NLH intends to continue its current method of purchasing fuel. In pre-filed evidence (pg. 22) Mr. Haynes stated that a minimum inventory of oil is always maintained which takes into account the range of demands on the plant during the year and potential shipping delays. Shipments are in the range of 250,000 to 300,000 barrels and require a 28-day notice under the contract. NLH maintains that the storage capacity at Holyrood has proven adequate to date and will continue to be sufficient to meet operational requirements into the foreseeable future. This conclusion was not challenged by the intervenors. The Board accepts NLH's conclusions regarding the adequacy of fuel storage at Holyrood and that further review will only be required when additional generation is considered necessary.

The Board accepts NLH's current fuel purchasing policies and practices.

ii) No. 6 Fuel

The cost of No. 6 fuel to be used at the Holyrood Generating Station represents the second major category of expense in the 2004 test year revenue requirement. NLH has proposed a test year revenue requirement for No. 6 fuel of $84,186,000. The forecast cost for No. 6 fuel depends on the forecast 2004 fuel price, the forecast fuel consumption and the forecast fuel conversion factor.

The Board has accepted NLH's thermal production forecast for 2004 of 1,780.61 GWh and NLH's forecast average weighted purchase price of $28.95 (Cdn) per barrel for No. 6 fuel. The Board set the conversion factor for No. 6 fuel at Holyrood at 630 kWh/bbl which will result in lower forecast fuel consumption for the 2004 test year and hence reduced No. 6 fuel costs.

The Board will direct NLH to reflect a fuel conversion factor of 630 kWh/bbl for No. 6 fuel at Holyrood in its 2004 test year fuel costs.

iii) Diesel Fuel

The second largest component of NLH's fuel expense category is diesel fuel. The 2004 test year cost is forecast to be $6,801,000. (Revised Evidence, J. C. Roberts, Schedule II, Oct. 31, 2003)

No issues with respect to the diesel fuel costs were raised by the intervenors and the Board accepts the test year cost as reasonable.

The Board accepts NLH's 2004 test year diesel fuel cost of $6,801,000.

iv) Other Fuels

An amount of $757,000 is included in the total fuel cost forecast for other fuels, which includes additives and indirects, ignition fuel, gas turbine fuel and environmental fees. (Revised Evidence, J. C. Roberts, Schedule II, Oct. 31, 2003)

No issues with respect to these fuel costs were raised. These costs compare to $871,000 included in the 2002 revenue requirement. The Board accepts these costs as reasonable.

The Board accepts NLH's 2004 test year costs for other fuels of $757,000.

4. Purchased Power

Purchased power expense is forecast to be $33,594,000 in 2004, an increase of $18,500,000 over the 2002 test year costs of $15,100,000.

On the Island Interconnected System NLH purchases power from two Non-Utility Generators (NUGS) at Star Lake and Rattle Brook, for a total forecast 2004 expense of $11,135,000. As well in 2003 NLH entered into two new agreements to purchase power with Abitibi Consolidated Company of Canada, as the agent for the Exploits River Hydro Partnership, and with Corner Brook Pulp and Paper Limited, which will provide a total additional capacity of 47.3 MW and average annual energy of 237 GWh. (Pre-filed Evidence, J. R. Haynes, Schedule II) The forecast purchased power expense for 2004 associated with these new purchased power contracts is $18,375,000, which accounts for almost all the increase in this expense category from the 2002 test year. The remaining $4,084,000 purchased power expense relates to the cost of purchases from Churchill Falls (Labrador) Corporation for customers on the Labrador

Interconnected System ($2,908,879), costs associated with the purchase of secondary energy for the L'Anse au Loup system from the Hydro-Quebec Lac Robertson Plant ($736,139), and other additional purchased power costs.

NLH's power purchase contracts with Corner Brook Pulp and Paper Limited and Abitibi Consolidated Company of Canada, as agents for the Exploits River Hydro Partnership, were exempted by Order-in-Council from the *Act* and the *EPCA*. The Board has also been directed by Order-in-Council to include the costs associated with these power purchases in NLH's expenses.

NLH's October 31, 2003 revised filing reflected an increase in costs for purchased power for Labrador Interconnected customers of $368,714. NLH described the primary reason for the increased costs as relating to an increase in previously unbudgeted costs of $331,784 for synchronous condenser maintenance and control upgrades at the Wabush Terminal Station. (NP-291)

In final argument (pg. B-44) NP submitted that, in the interest of rate stability, these costs should be deferred and amortized over a five year period beginning in 2004. In cross-examination by NP Mr. Roberts stated that *"these costs aren't necessarily extending a life of a particular asset, it's only ensuring that the actual estimated service life that's presently there is being and will be achieved."* (Transcript, Nov. 12, 2003, pg. 130/12-15)

NLH submitted that the Board should allow all of the costs forecast for purchased power for the 2004 test year.

With the exception of NP's submission regarding the Wabush Terminal Station expense, intervenors did not object to NLH's 2004 forecast purchased power expense.

The Board notes that the Wabush Terminal Station assets are owned by Twin Falls Power Corporation. NLH pays for the right of capacity in that Terminal Station and, by agreement, pays a proportionate share of the cost associated with any repairs that are done on that facility. (Transcript, Nov. 12, 2003, pg. 82/1-9) Given that NLH does not own the asset the Board is satisfied that these costs should not be deferred as proposed by NP but are appropriately treated as a recurring operating expense.

In light of the Government direction the Board accepts the costs associated with the two new power purchase agreements to be included in the 2004 test year costs. The Board also accepts the other elements of the power purchase expense estimated by NLH and included in the 2004 test year revenue requirement.

The Board accepts NLH's 2004 test year purchased power expense of $33,594,000.

5. Other Operating Expenses

i) Salaries and Fringe Benefits

The forecast expense of $63,242,000 for salaries and fringe benefits accounts for 63% of the *"Other Costs"* in NLH's 2004 test year revenue requirement, as follows:

2004 Test Year Salaries and Fringe Benefits ($000's)	
Salaries	$ 49,925
Director's fees	62
Overtime	2,869
Employee future benefits	3,727
Fringe benefits	7,110
Group Insurance	1,950
Labrador travel benefit	99
Vacancy allowance	(2,500)
Total	**$ 63,242**

(NP-304, pg. 2)

Mr. Wells testified that since 1992 NLH has eliminated 211 positions, representing a 21% reduction in NLH's permanent workforce and that approximately 10%, or nearly half of the total reduction, was achieved in the period 2000 to 2002. This reduction in workforce results from organizational changes, process improvements and technological changes. (Revised Evidence, W. E. Wells, Aug. 12, 2003, pgs. 8; 15/3-4)

The comparison of gross salary costs between the 2004 test year and the 2002 test year indicates an overall increase as follows:

Comparison of Gross Salary Costs - 2002 and 2004 (000's)	
Decrease in salaries (net of vacancy adjustment)	($ 1,166)
Increase in employee future benefits	1,294
Increase in fringe benefits	684
Increase in group insurance	270
Increase in overtime costs	248
Net Increase	**$ 1,330**

(Grant Thornton 2003 General Rate Hearing Report, pg. 41)

According to NLH its core wage expense has tracked below the rate of inflation since 1992. (Revised Evidence, W. E. Wells, Aug. 12, 2003, pg. 8, Chart 1) During cross-examination the IC requested a reproduction of this chart using 1997 as year one at the 100 index. (U-Hydro # 2) It showed that since 1997 NLH's core wage expense has tracked above the inflation rate, which, according to the IC, demonstrated that the comparison depends on what year is used as the base year.

NLH indicated that the elimination of 46 positions during 2002 will result in annual savings of $2,600,000. (Transcript, Oct. 15, 2003, pg. 153/14-18) These savings will be offset by forecast increases in union and non-union wages, using an effective date of January 1, 2004. (NP-14)

NP submitted that since NLH used a January 1, 2004 effective date to estimate the effect of wage increases, the 2004 test year salary costs should be reduced by $300,000 to more appropriately reflect the April 1, 2004 effective date for bargaining unit wage increases. (Brief of Argument, NP, pg. B-24/12-14)

NLH submitted that the 2004 forecast includes an increase in union wages as of April 1, 2004, as well as a 3% adjustment for non-union employees that became effective January 1, 2004. NLH argued that NP simply took the total increase and reduced it by a quarter, forgetting or ignoring the fact that over half of the salary/wage budget is for non-union employees who did get an increase as of January 1, 2004. In addition, there were progression increases for non-union employees as of January 1, 2004. NLH argued there is absolutely no evidence to support the reduction of $300,000 in salary expense. (Transcript, Jan. 16, 2004, pgs. 28/10-15; 29/1-12)

NP also argued that the 2004 test year salaries forecast should reflect $600,000 in savings due to the elimination of 10 FTEs in 2003 and $100,000 in savings related to changes in the area of meter reading. NP pointed out that the evidence of Mr. Roberts and Mr. Brushett indicates that this $700,000 in savings is included in the $2,500,000 vacancy allowance. (Brief of Argument, NP, pgs. B-24/17-19; B-26/14-17) NP believes that this is an inappropriate treatment of these savings and recommended that the Board order NLH to reduce its test year salaries by $700,000 to reflect the fact that these positions have already been eliminated from NLH's workforce in 2003. (Brief of Argument, NP, pg. B-27/1-2)

NLH argued that the salary savings of $700,000 were taken into account in the final salary numbers submitted to the Board and are reflected in the $2,500,000 allowance. NLH also argued that it would not have increased the allowance to $2,500,000 if the elimination of these positions had not been taken into account. (Transcript, Jan. 16, 2004, pgs. 29/20-25, 30/1-5)

NLH's test year vacancy allowance of $2,500,000 consists of $1,000,000 for normal vacancies (2.5% of $40,000,000 in permanent salaries) and $1,500,000 for future staffing reductions resulting from process improvement initiatives. (Transcript, Oct. 15, 2003, pg. 55/7-12) NP submitted, in its final argument (pg. B-29), that the $1,000,000 used to estimate normal vacancies is inadequate and does not reflect recent experience. Instead, using the average vacancy rate of 3.5% that has resulted from actual experience over the period from 1993 to 2001, NP argued this figure should be increased to $1,600,000.

Based on the evidence the Board is satisfied that the test year costs for salaries and fringe benefits includes the $700,000 associated with the elimination of 10 FTEs and meter reading. This amount is included in the vacancy allowance, as confirmed by NLH and Grant Thornton and acknowledged by NP in its final argument. (pg. B-26) While NP has requested the Board reduce NLH's salary costs by this amount, any such adjustment would require an adjustment in the vacancy allowance by the same amount. The result would be a decrease in both the salary forecast and the vacancy allowance, with no change in the test year salary costs. The Board will not order NLH to reduce its 2004 test year salaries by $700,000 as requested by NP, and accepts the test year salary costs as reasonable.

With respect to the vacancy allowance the Board is not satisfied that NLH's forecast of $1,000,000 for normal vacancies is adequate based on recent experience. NLH's response to NP-34 indicates the normal vacancy rate has averaged approximately 3.5%, compared to the 2.5% used by NLH in its Application. This would result in a normal vacancy allowance of $1,400,000. The Board also agrees with NP's argument that the normal vacancy allowance indicated for both 2003 and 2004 is approximately $1,600,000, based on NLH's average vacancies. The Board finds that a normal vacancy allowance of $1,500,000 should be used in the 2004 test year to reflect recent experience.

NLH has also added $1,500,000 to its normal vacancy allowance to provide for future staffing reductions resulting from process improvement initiatives currently underway. As discussed above this amount also includes the $700,000 in savings already realized as a result of NLH's business improvement processes. The Board is satisfied that this amount represents a reasonable target for savings in this area.

The Board also recognizes the confusion brought on by the transition to the FTE method of forecasting salary expense and is encouraged by the statement of NLH's Counsel, Ms. Greene, that *"In the future, you will only see the FTE basis, so I think that will simplify the process"*. (Transcript, Oct. 24, 2003, pg. 64/17-19) The Board expects NLH's next general rate application will include historical and forecast information stated in terms of FTEs.

The Board will direct NLH to reduce its 2004 test year salary expense by $500,000 to reflect a higher vacancy allowance.

ii) System Equipment Maintenance

System equipment maintenance is the second largest category of *"Other Costs"* expenses and accounts for $17,440,000 or 17% of the total *"Other Costs"* in the 2004 test year. The Holyrood Generating Station maintenance expense is $7,200,000 (Information #6) with the remaining amount used for projects such as maintenance of the transmission and distribution lines, hydraulic generating stations, isolated diesel and gas turbine generators and related equipment.

In Order No. P. U. 7(2002-2003) the Board directed NLH to submit by December 31, 2002 a detailed plan of projected maintenance expenditures for the Holyrood Generating Station for the next 10 years. The plan (Information #6) was filed on December 23, 2002 and addresses the operating maintenance expenditures for the years 2003-2013 inclusive. It was noted that generating Units Nos. 1 and 2, as well as the gas turbine, two of the main fuel storage tanks and other associated ancillary equipment are in excess of 30 years old. Unit No. 3 and the remaining two main fuel storage tanks are in excess of 20 years old. While many components of this equipment have been replaced and additional items added through the capital program over the years, numerous pieces of the original equipment and components still remain in service.

The Board acknowledges the significant expenditures associated with maintenance at the Holyrood thermal plant. The 10 year plan assists in monitoring the development of the overall maintenance program, both capital and operating, and is therefore a useful regulatory filing.

NLH pointed out that its 10 year plan of system equipment maintenance has to be viewed in the context of the harsh operating environment in which it operates and the age of the units, and changes to the plan that will result from unforeseen events. NLH contends that it is not possible to *"levelize"* the cost of maintaining a plant such as Holyrood where there are so many different operating systems and components. However, in order to meet customers' load and reliability expectations while controlling costs, NLH has pursued a proactive maintenance approach using sound engineering judgment to ensure its equipment is available for service as required. (Pre-filed Evidence, J. R. Haynes, pgs. 10-11)

In recent years NLH has adopted a Reliability Centered Maintenance (RCM) program which places emphasis on reliability and results in some systems receiving more frequent maintenance. NLH believes that this approach will result in a more effective and efficient maintenance program. The 2004 test year savings as a result of RCM are forecast to be $1,000,000. (CA-113; NP-277, pg. 1)

Order No. P. U. 7(2002-2003) directed NLH to present a summary report with recommendations on how it might improve reliability for customers in coastal Labrador communities. This direction was prompted by concerns raised by several coastal Labrador residents during NLH's 2001 general rate hearing concerning brown-outs, loss of supply, outages and customer service. The report <u>Summary Report on Reliability and Quality of Service to Coastal Labrador Communities</u> was filed with the Board on September 27, 2002. (CA-14) In this report NLH described a number of initiatives undertaken to address specific issues in these communities.

In addition to the specific actions taken to address the 2001 complaints in Nain, Charlottetown, Mary's Harbour and L'Anse au Loup, NLH has a number of ongoing initiatives to improve overall system performance, including reliability. These include electronic mechanisms on all new diesel engines to enable remote monitoring of performance, new or updated programs of engine replacement, condition based monitoring, RCM, tool inventory and Diesel System Representatives to provide multi-skilled personnel in isolated diesel areas. These initiatives have all been designed to give greater flexibility and improved customer service. The Board notes that complaints with respect to the service quality issues in coastal Labrador communities were not raised during the latest public presentations in Happy Valley-Goose Bay.

The intervenors did not raise any issues in relation to NLH's 2004 test year expense for system equipment maintenance.

The Board will require NLH's 10 year plan of maintenance expenditures for the Holyrood Generating Station to be updated annually to reflect changing operating circumstances.

The Board accepts NLH's 2004 test year system equipment maintenance expense of $17,440,000.

iii) Transportation

This category of expense is forecast to be $2,044,386 in the 2004 test year, as summarized below:

Transportation Expenses	
Aircraft fuel	$ 100,000
Aircraft costs	950,000
Vehicle fuel	1,058,996
Mobile equipment fuel	46,000
Vehicle rental	136,692
Vehicle allowance	52,698
Capital fleet	(300,000)
Total	**$2,044,386**

(Revised Evidence, J. C. Roberts, Schedule II; Oct. 31, 2003, NP-261)

Mr. Martin stated that NLH is in the process of conducting a review of both its on-road and off-road fleet of vehicles. (Transcript, Oct. 24, 2003, pgs. 100/15-25; 101/7-9) Mr. Martin explained that transportation expense gets credited with the costs incurred when vehicles are used on capital projects. This credit, which is forecast to be $300,000 in the 2004 test year, varies annually depending on the nature and amount of the capital projects. (Transcript, Oct. 24, 2003, pg. 113/18-22; NP-261)

NP raised an issue concerning the 2004 forecast transportation expense in relation to the reduced number of employees from 1998 to 2002. During that period the number of permanent staff declined from 889 to 801 while the number of vehicles rose from 274 to 282. (NP-10; NP-24) Mr. Martin explained that the reduction in staff would not necessarily relate to a reduction in vehicles since some layoffs have been in the engineering department and some have been clerical staff, neither classification being users of NLH vehicles. The increase in vehicles from 1998 to 2002 reflects the difference between 15 units purchased for capital projects and seven units eliminated due to fleet rationalization. (Transcript, Oct. 27, 2003, pgs. 8/2-21; 9/8-16)

NP submitted that NLH's vehicle operating costs have increased 25.6% from 2002 to forecast 2004 and that vehicles that were purchased for capital projects such as Granite Canal are now being charged to operations and maintenance, resulting in a reduction in capitalized vehicle costs. NP argued the Board should disallow the $185,000 increase in NLH's 2004 forecast vehicle operating expense because of a decrease in the utilization of vehicles on capital projects. NP noted that NLH is presently conducting a review of its vehicle fleet but have made no adjustments in the test year costs to reflect any savings. (Brief of Argument, NP, pgs. B-37/7-11; B-38/11-13)

Mr. Martin explained that aircraft transportation costs are primarily for leasing of helicopters. NLH pays a fixed retainer fee of $800/day for 365 days a year which, according to Mr. Martin, ensures the availability of transportation for repair crews during emergency situations.

Since NLH forecast a $150,000 reduction in its 2003 transportation (aircraft) expense NP argued a similar reduction in the 2004 transportation expense is warranted. (Brief of Argument, NP, pgs. B-38/24-25; B-39/10-11)

NLH submitted that 2003 was an anomaly which NLH does not expect to be repeated in 2004. (Transcript, Jan. 16, 2004, pg. 34/18-22)

The Board agrees that NLH has not shown sufficient justification for the $185,000 increase in vehicle operating expense due to the decrease in utilization of vehicles on capital projects. The Board is of the opinion that the completion of the Granite Canal project, resulting in a reduction in capitalized vehicle costs and a reduction in staff, should translate into a reduction in NLH's fleet of vehicles. As well the vehicle study, ongoing at the time of the hearing, may result in additional savings. The expense of $185,000, therefore, will be disallowed in the 2004 test year forecast. The Board will not order a reduction for aircraft expenses, as argued by NP.

The Board will direct NLH to reduce its 2004 test year transportation expense by $185,000.

iv) Miscellaneous Expenses

The table below shows the 2004 test year miscellaneous expenses:

Miscellaneous Expenses	
Staff Training	$712,649
Contributions (charities, etc.)	194,000*
Sundry Costs	81,818
Diesel Fuel Hydro	39,400
Demand side management	100,000
Employee expenses	322,526
Collection fees	8,520
Bad debt expense	324,996
Inventory gain/loss	370,000
Municipal and payroll taxes	2,224,694
	4,378,603
***Less: Non-regulated-Contributions**	(194,000)
Total	**$4,184,603**

(Information #9; Revised Evidence, J. C. Roberts, Schedule II, Oct. 31, 2003, pg. 4)

Grant Thornton did not identify any particular concerns respecting the items included in this category of expenses and the forecast for the 2004 test year.

NP took issue with the amount of inventory gain/loss forecast by NLH for the 2004 test year. (Brief of Argument, NP, pg. B-42) NP noted that NLH undertook an initiative in 2001 to identify excess and obsolete inventory, resulting in a $1,000,000 write-off. The actual inventory write-off in 2002 was $306,000 lower than forecast. NP pointed out that the write-offs in 2003 and 2004 test year are significantly higher than experienced in 2002. NP submitted that NLH has not provided sufficient justification to increase forecast inventory write-offs in the 2004 test year and that the Board should order NLH to reduce this cost in 2004 by $132,000.

NLH argued that NP's submission:

> (Ms. Greene) ...neglected to point out that 2002 was not a representative year for write-offs. The response to NP-254 points out that the bulk of the inventory reductions forecast over 2001 and '02 were achieved in 2001, leading to an abnormally low 2002. So we believe that what's in the 2004 revenue requirement for inventory write-offs is consistent with past practice and that 2002, for the reasons explained, was an anomaly.
>
> (Transcript, Jan. 16, 2004, pg. 36/8-17)

The Board does not agree with NP that some of the elements, as described above, in the miscellaneous expense category should be reduced for the 2004 test year. The Board accepts the forecast costs for the miscellaneous expense category as reasonable.

The Board accepts NLH's 2004 test year miscellaneous expense of $4,185,000.

v) Other Cost Categories

In addition to the various expense categories dealt with in other parts of this Decision and Order, the remaining categories of operating expenses are forecast for the 2004 test year as follows:

Operating Expenses	
Professional Services	$ 4,253,000
Travel	2,395,000
Office Supplies	1,913,000
Insurance	2,019,000
Equipment rentals	1,756,000
Building rentals and maintenance	894,000
Total	**$13,230,000**

(Revised Evidence, J. C. Roberts, Schedule II, Oct. 31, 2003)

Professional Services expense relates primarily to consulting services, regulatory activities and the business improvement process which commenced in 2001. While this expense has exhibited a significant upward trend over the past four years, the forecast for 2004 test year reflects a decrease of 20.8% compared to 2002 actuals. The following is a summary of the professional services expense for the forecast 2004 test year compared with the actuals for 2002:

Professional Services Expense (000's)		
	2002 Actual	**2004 Test Year**
Professional Services	$ 3,315	$ 2,013
Regulatory related costs	806	1,150
Software acquisition & maintenance	1,202	1,090
Non-regulated	(5)	
Total Professional Services	**$ 5,318**	**$ 4,253**

(Grant Thornton 2003 General Rate Hearing Report, pg. 44; Revised Evidence, J. C. Roberts, Schedule II, Oct. 31, 2003, pg. 6)

The higher costs in the professional services category for 2002 related primarily to the business process improvement project. This initiative alone accounted for $1,010,000 in consulting fees in 2002, which are not included in the 2004 Professional Services expense. (Grant Thornton 2003 General Rate Hearing Report, pg. 45) NLH has estimated external regulatory costs of $1,200,000 for the Board and the CA related to the current hearing. NLH requested that any additional costs as a result of the Board awarding costs be added to this total. NLH also proposed that these costs be amortized over a three year period beginning in 2004, consistent with prior hearings. (Final Argument, NLH, pgs. 89/10-30; 90/1-4)

The forecast 2004 travel expense of $2,395,000 is 3.5% higher than the 2002 actual. This category also includes conference travel ($217,000) and training ($256,000), which have been moved from Miscellaneous-Training in the revenue requirement to Travel. Excluding conference travel and training, travel expense has decreased from $2,213,000 in 2002 to a forecast of $1,922,000 in 2004. Grant Thornton indicated this is as a result of NLH's adoption of the RCM program, its initiative to use less internal staff for capital projects and the completion of two major capital projects. (Grant Thornton 2003 General Rate Hearing Report, pg. 46/5-15; Revised Evidence, J. C. Roberts, Schedule II, Oct. 31, 2003, pg. 6/Notes 21; 23)

NP noted that the transfer of travel costs related to training, to be now charged directly to Travel, has resulted in a net reduction for 2003 of $271,000. NP suggested this same reduction in expense should be carried forward into the 2004 test year as a reduction in travel costs of $300,000.

NLH submitted that it has provided its best estimate of training and there is no evidence to support the recommendation that the associated travel expense should be decreased. (Transcript, Jan. 16, 2004, pg. 35/16-25)

Office supplies expense is consistent from 2001 to the 2004 test year forecast with no significant variances. (Grant Thornton 2003 General Rate Hearing Report, pg. 47/20-21)

Insurance expense has increased from $949,000 in 2001 to $2,019,000 in the 2004 test year, an increase of 113%. (NP-260) Mr. Roberts indicated that a restricted market is contributing to significant increases in insurance costs. (Pre-filed Evidence, J. C. Roberts, pg. 4)

In addition, NLH adds gross assets of approximately $35,000,000 a year, which require insurance coverage. (Grant Thornton 2003 General Rate Hearing Report, pgs. 46/25; 47/3-8)

The forecast equipment rentals expense of $1,756,000 for 2004 is 28% over 2002 actuals, due mainly to the increasing costs of leasing communication circuits, internet connection and licensing. (Grant Thornton 2003 General Rate Hearing Report, pgs. 46/25; 47/27-33; Revised Evidence, J. C. Roberts, Schedule II, Oct. 31, 2003, pg. 6/9-10)

The forecast building rentals and maintenance expense of $894,000 is consistent with the 2002 actual experience. (Grant Thornton 2003 General Rate Hearing Report, pg. 46/25)

With respect to NP's submission that the 2004 test year travel expenses should be reduced by $300,000, the Board notes that the reduction in 2003 resulted from updated figures included in the revised October 31, 2003 filing and not the transfer of expense from one account to the other. The Board is satisfied that NLH's forecast of travel costs related to training is reasonable and justified.

The Board acknowledges NLH's request that any additional costs as a result of the Board awarding costs in this Decision and Order be added to NLH's estimate of regulatory costs to be amortized over a three year period. While the final costs of this hearing, including any cost awards, will not be finalized prior to this Decision and Order, the Board will allow an increase in the total regulatory costs of $600,000 to cover any additional costs, including cost awards, which may be incurred over and above the $1,200,000 estimated by NLH. While the Board acknowledges that this amount may or may not cover the full costs, in the interest of fairness and regulatory efficiency, the Board is satisfied that this amount is reasonable and will allow for substantial recovery of these costs by NLH. The Board will allow NLH to increase its regulatory costs by $600,000 with the total regulatory costs to be amortized over a three year period as proposed by NLH.

No other specific issues were raised by the intervenors. The Board accepts the Other Cost Categories as reasonable and justified.

The Board accepts NLH's 2004 test year expenses for travel, office supplies, insurance, equipment rentals and building rentals and maintenance, totalling $8,977,000.

The Board will allow an increase in the 2004 test year professional services expense of $200,000 to reflect the amortization over a three year period of additional regulatory costs.

6. Loss on Disposal of Capital Assets

NLH's forecast for loss on disposal of capital assets in the 2004 test year is $1,266,000, which includes an amount of $725,000 for the costs associated with the abandonment of the Davis Inlet diesel plant. (Revised Evidence, J. C. Roberts, Schedule II, Oct. 31, 2003, pgs. 1; 6/Note 24) NLH is presently serving customers in Davis Inlet and in the new community of Sango Bay (Natuashish), where NLH is providing management services on behalf of the Federal

Government. Once all the residents of Davis Inlet have relocated to Natuashish, NLH will be removing its assets from Davis Inlet.

In supplementary evidence (pg. 7) Grant Thornton stated the increase in the loss on disposal of capital assets of $725,000 due to the projected discontinuance of service to Davis Inlet is unusual and not recurring in nature. Grant Thornton suggested it would be inappropriate to include an unusual item such as this in a test year revenue requirement being used to set rates for the coming years. Grant Thornton recommended that this cost be amortized over a three to five year period to normalize the 2004 test year forecast.

NLH pointed out during cross-examination of Mr. Brushett that, upon review of the decommissioning activities of NLH over the past several years, the amount forecast for the 2004 test year did not appear to be unusual. Mr. Brushett acknowledged that NLH has decommissioned a number of facilities over the years but stated that his reason for recommending the amortization of the expense over three to five years was to minimize the impact on rates in the test year. (Transcript, Dec. 11, 2003, pg. 29/14-20)

NP pointed out that in the 1995 Rural Rate Inquiry NLH indicated that it would insist on Federal Government funding for NLH's incremental capital costs in relation to the relocation of the community of Davis Inlet. Mr. Roberts testified that, although the Federal Government contributed to the cost of the new generating plant at Natuashish, it would not reimburse NLH for the loss on disposal of capital assets resulting from the decommissioning of the Davis Inlet plant. (Transcript, Nov. 12, 2003, pg. 124/7-10) NP argued that the contribution of the Federal Government to the cost of the new plant at Natuashish would result in reduced depreciation and interest expense for NLH in future years. NP agreed with Grant Thornton's recommendation and submitted that the Board order the amortization of this amount over a five year period. (Brief of Argument, NP, pg. B-41)

In final argument (pg. 41) NLH submitted that, given that there have been significant disposals of diesel plants by NLH and the fact that the average loss on disposals for the past five years is higher than the 2004 forecast loss (including the loss for the disposal of the Davis Inlet plant), it is difficult to see how one can conclude that the costs associated with the abandonment of Davis Inlet are unusual. NLH argued that the full costs of decommissioning the Davis Inlet plant should be included in the 2004 test year.

There were no other issues raised by the intervenors with respect to this expense category.

The Board agrees with NLH that the loss on disposal of assets relating to the decommissioning of the Davis Inlet plant is not unusual in itself when compared to previous years' losses on disposal resulting from plant closures. The Board also notes that the 2004 test year expense of $1,266,000 associated with the loss on disposal of capital assets (including Davis Inlet decommissioning costs) is significantly lower than the average loss on disposal since1998. NLH has decommissioned a number of facilities since 1998, including Southeast Bight and Mud Lake in 1998, LaPoile in 1999, Harbour Deep in 2002 and Petites in 2003. (Transcript, Dec. 11, 2003, pgs. 23-24) Given this recent experience and the fact that the average loss on disposal of assets for the past five years is higher than the 2004 forecast loss the Board accepts the test year expense as forecast by NLH as reasonable. The full costs of decommissioning the Davis Inlet Plant will be included in the 2004 test year costs.

The Board accepts NLH's 2004 test year expense of $1,266,000 for loss on disposal of capital assets.

7. Capitalized Expenses

Expenses associated with capital projects, such as salaries and benefits of NLH employees who are working on capital projects and related departmental and non-departmental overhead, are capitalized and then credited to the proposed revenue requirement. (Grant Thornton 2003 General Rate Hearing Report, pg. 49/21-22) NLH is forecasting that the capitalized expense credit for the 2004 test year will be $5,200,000. (Revised Evidence, J. C. Roberts, Schedule II, Oct. 31, 2003)

The following table is a breakdown of NLH's capitalized expense since 2001:

Capitalized Expenses - 2001 to 2004					
	2001	**2002**	**2002 Test Year**	**2003 Forecast**	**2004 Forecast**
Salaries	$8,977,207	$8,116, 250	$5,722,500	$7,913,000	$5,204,951
Fleet Expense	473,546	485,670	300,000	400,000*	300,000*
Travel direct work orders	115,693	21,341	108,640		
Total	**$9,566,446**	**$8,623,261**	**$6,131,140**	**$6,805,373**	**$5,503,951**

*From Grant Thornton's 2003 General Rate Hearing Report – not confirmed or updated in NLH's evidence
(Grant Thornton 2003 General Rate Hearing Report, pg. 49; Revised Evidence, J. C. Roberts, Schedule II, Oct. 31, 2003, pgs. 4/Note 13; 5/Note 25)

In Order No. P. U. 7(2002-2003) the Board acknowledged that a review of the methodology and approach used by NLH to determine capitalized expenses would be appropriate. However, because of the many other regulatory issues to be dealt with at that time the Board did not require NLH to undertake such a study. Mr. Roberts explained the methodology used by NLH to allocate expenditures to capitalized expense, and stated the estimate will vary in any given year depending on the utilization of NLH's internal resources. (Transcript, Oct. 14, 2003, pgs. 146-151)

NP-19 indicated that NLH's capitalized expenses as a percentage of capital expenditures from 1998 to the 2004 test year have ranged from 7% to 19%. The forecast capitalized expenses for 2003 and 2004 are 18% and 16% of capital expenditures respectively (based on NLH's May filing), which Grant Thornton found to be reasonable when compared to prior years. (Grant Thornton 2003 General Rate Hearing Report, pg. 50/16-18) Mr. Brushett testified, however, that it is appropriate for the Board to look at NLH's past experience in terms of the impact that capitalized expenses have had upon determining revenue requirement. (Transcript, Dec. 11, 2003, pg.116/15-23)

Mr. Roberts agreed that NLH's estimates of capitalized expense have varied by an average of approximately $2,900,000 between 1998 and 2002. (Transcript, Oct. 14, 2003, pg. 144/7-20) In Information #25 NP indicates that over the period 1998 to 2002 NLH's budgeted capitalized expenses have varied by an average of $2,200,000 compared with actuals. The difference in the two averages is that Information #25 includes an adjustment for capitalized overtime.

NP stated that under-estimating capitalized expense in the test year results in an increase in forecast net operating expenses and test year revenue requirement while increasing earnings to NLH when higher actual capitalized expenses are recorded. NP submitted that, considering NLH's estimating experience since 1998, it would be appropriate for the Board to increase NLH's forecast capitalized expense for the 2004 test year by $2,000,000. (Brief of Argument, NP, pgs. B-33 to B-35)

The other intervenors did not put forward a position on the matter of NLH's capitalized expenses.

In final argument (pg. 38) NLH suggested that, while there may be evidence the actual capitalized expense has exceeded the budget in previous years, the revised October 31, 2003 forecast for the 2004 test year was based on the knowledge of the approved capital budget and the internal resources to be used in completing that budget. NLH argued, in these circumstances, it would be inappropriate to make an arbitrary adjustment to the capitalized expenses forecast for 2004.

Considering the historical level of capitalized expense and the variance with forecast, the Board is satisfied that an increase of $2,000,000 in NLH's capitalized expense forecast for the 2004 test year is warranted.

With respect to the methodology for capitalizing expenses, the Board notes that the full-cost method currently used by NLH to capitalize general expenses to capital assets is different than the incremental method used by NP and approved by the Board in Order No. P. U. 3(1995-96). Both methodologies, in the Board's view, conform to generally accepted accounting principles. In this Decision the Board has adjusted NLH's capitalized expenses to reflect actual experience. There is no evidence before the Board that the full-cost approach does not continue to be an appropriate methodology. The Board will not direct a review of the methodology used by NLH to determine capitalized expense as contemplated in Order No. P. U. 7(2002-2003).

The Board will direct NLH to increase its 2004 test year capitalized expense by $2,000,000.

8. Non-Regulated Operations and Inter-Company Charges

Non-regulated operations are all costs associated with any asset which is not used and useful in the generation, transmission and distribution of electrical power, energy activities exempted by specific legislation, and costs specifically identified by the Board as being non-recoverable from ratepayers. Inter-company charges are those costs that NLH recovers for the provision of services to CF(L)Co. Expenses associated with non-regulated operations and inter-company charges are deducted from NLH's expenses to determine the regulated revenue requirement. For the 2004 test year NLH has reduced its revenue requirement by $1,858,000 for charges to CF(L)Co and $2,684,000 for non-regulated operations.

In Order No. P. U. 7(2002-2003) the Board directed NLH to file, on or before December 31, 2002, the written policies and procedures to account for all intra- and inter-corporate transactions, identifying what is to be included in regulated and non-regulated activities as a normal reporting function. The report was submitted in December 2002 and filed in this hearing as Exhibit JCR-2. The Board also ordered NLH, for the purpose of regulatory reporting, to file separate financial statements for regulated and non-regulated activities, including reconciliation with annual consolidated financial statements. NLH has complied with this requirement.

Grant Thornton reviewed the report during its 2002 Annual Financial Review and concluded that NLH had appropriately identified and defined its various non-regulated operations and had established appropriate procedures for recording and reporting these activities. (Information #3, pgs. 33-34)

The methodology used by NLH for determining inter-company charges was reviewed by Grant Thornton in its 2003 General Rate Hearing Report (pgs. 48-49) and no concerns or issues were noted.

The only issue with respect to this expense category was raised by the IC regarding NLH's practice of adding back non-regulated expenses to equity, which increases the equity and the actual dollar return to NLH. Mr. Brushett, in response to questioning from the IC, agreed that there is a counter-argument to NLH's method of dealing with these expenses that suggests they should be charged to the shareholder. Mr. Brushett added that logically, if the shareholder has been denied both a return and the expense, it could be deemed a double penalty. (Transcript, Dec. 11, 2003, pg. 143/11-20)

In final argument (pg. 16) the IC submitted that NLH's practice treats the monies as if they had not been spent at all, thus allowing NLH a return on these funds which it had already applied to its own, or its shareholder's purposes. This practice, the IC argued, is not justified and the Board should disallow it.

NLH submitted that its practice is consistent with regulatory practice in this jurisdiction and that such treatment has been consistently approved by the Board for NP. (Transcript, Jan. 16, 2004, pg. 37/10-19)

The other intervenors made no submissions on this issue.

The Board notes that this is essentially the same issue raised during NP's general rate hearing in 2003. NLH raised this issue at that time and put forward arguments with respect to using *"book equity"* versus *"regulated equity"* in measuring return on equity. Regulated equity is derived by adding to book equity the cumulative non-regulated expenses of the utility. In Order No. P. U. 19(2003) the Board acknowledged that the arguments with respect to using book equity have considerable merit. The Board directed NP to address the issue of discontinuing the use of regulated common equity in favour of book equity no later than its next general rate application. In the interest of consistency in regulatory practice the Board will direct the same for NLH.

The Board accepts NLH's treatment of non-regulated expenses and inter-company charges in determining its 2004 test year revenue requirement.

The Board will direct NLH to file a report on the appropriateness of discontinuing the use of regulated equity in favour of book equity as part of its next general rate application.

9. Interest Expense

The forecast regulated interest expense for the 2004 test year is $98,165,000, calculated as follows:

2004 Test Year Regulated Interest Expense (000's)		
Interest on short-term promissory notes and long-term debentures		$108,295
Add:	**Amortization of foreign exchange loss**	2,157
	Amortization of debt discount and issue expense	915
	Debt guarantee fee	14,684
		126,051
Less:	**Interest on sinking fund assets**	8,520
	CF(L)Co share purchase debt	2,116
	Financing charges – Rate Stabilization Plan	12,065
	Interest on overdue accounts	292
	Allowance for funds used during construction	4,892
	Interest on assets not in service	1
	Total	**$98,165**

(PUB-194; Revised Evidence, J. C. Roberts, Schedule VII, Oct. 31, 2003)

The Province guarantees NLH's debt and receives an annual fee equivalent to 1% of the previous year's debt net of sinking funds. The intervenors did not raise any issue with respect to the amount of the guarantee fee paid by NLH and included in the interest expense of the 2004 revenue requirement. In its discussion on capital structure and ROE, the Board acknowledged the importance of the guarantee fee in ensuring NLH's creditworthiness and accepted the level of the guarantee fee as reasonable.

NLH's revised evidence dated October 31, 2003 reflects a reduction in forecast short-term interest rates in the 2004 test year from an average of 5.0% to 2.78% resulting in a reduction in the interest expense of $3,550,000. There was also an increase of $23,000,000 in forecast promissory notes primarily due to higher forecast borrowing requirements in 2003.

These increased borrowing requirements were identified as being comprised primarily of increased fuel expense, lower proceeds from long-term debt issues and changes in non-cash working capital. (Revised Evidence, J. C. Roberts, Schedules II; V, Oct. 31, 2003)

In final argument NP took issue with the unexplained use of the accounts payable as a balancing number in determining borrowing requirements that could not be explained to its satisfaction by Mr. Roberts. NP also referred to the evidence of Mr. Brushett, who acknowledged that NLH's use of accounts payable as a balancing number would almost seem contrary to standard practice. (Brief of Argument, NP, pg. C-5; Transcript, Dec. 11, 2003, pg. 119) NP argued that the Board should order a $278,000 reduction in NLH's 2004 interest expense based on the unexplained and unjustified decrease in forecast accounts payable for 2003 and 2004, and impacts on short-term promissory notes and test year interest expense. (Brief of Argument, NP, pg. C-6/5-8)

Mr. Roberts stated during cross-examination that the accounts payable number is simply a balancing number applied to the balance sheet and it has no other significance. (Transcript, Nov. 12, 2003, pgs. 114-117) NLH argued that satisfactory answers were provided in responses to requests for information and through cross-examination in respect of all the issues raised by the intervenors and submitted that the interest expense as proposed by NLH for the 2004 test year should be approved. (Final Argument, NLH, pg. 25/5-25)

The Board acknowledges that the evidence is confusing as it relates to the forecast balances for accounts payable and the potential impact on the forecast borrowing requirements for 2003 and 2004. The explanation provided by Mr. Roberts did not clarify this issue for the Board. However, there is evidence that the treatment of accounts payable has been reviewed and justified recently as part of the Business Improvement Process. (Transcript, Oct. 14, 2003, pg. 101/14-17; Jan. 16, 2004, pg. 21/18-22) In addition the calculation of an expense lag in the working capital allowance calculation requires appropriate review of expenditures both when incurred and paid. While there is lack of clarity with respect to the accounts payable explanation, the Board is satisfied that NLH has appropriately estimated this amount and does not feel that the evidence supports a reduction in the forecast interest expense as proposed by NP.

The Board accepts NLH's 2004 test year interest expense, subject to any adjustments arising from this Decision and Order.

10. Productivity Allowance

Order No. P. U. 7(2002-2003) imposed a reduction in NLH's 2002 test year revenue requirement in the form of a productivity allowance in the *"Other Costs"* category of expenses, in the amount of $2,000,000. In deciding on the productivity allowance the Board stated:

> *"The Board has no level of comfort regarding individual cost savings or efficiencies and the Board is left with little choice in keeping with the least cost power policy of the Province but to impose an appropriate productivity allowance as suggested by GT and the intervenors."*

Mr. Wells suggested that for the Board to impose a productivity allowance for the 2004 test year would *"..only operate as a disincentive and a penalty"* in light of the continuous improvement process that NLH now has in place to measure performance throughout the organization. (Transcript, Oct. 6, 2003, pg. 33) Mr. Wells explained that the business improvement process was initiated in early 2002 by the retention of consultants to provide initial impetus and expertise on methods employed to review business processes. The consultant was identified by Mr. Wells, in cross-examination by NP, as Covenco, a firm from Ontario which was retained at a cost of $1,000,000. (Transcript, Oct. 7, 2003, pg. 75)

NP argued that, given NLH's performance since its 2001 general rate application and NLH's current operating characteristics, the Board should exercise its regulatory judgement in determining what is an appropriate productivity allowance for NLH. NP noted the Board may wish to consider a number of items in relation to a productivity allowance, including increases in 2004 test year costs, prior staff reductions realizing salary savings in 2004, confusion surrounding use of FTE's and difficulty in estimating savings attributable to business process reviews. NP submitted a productivity allowance of $2,000,000 remains appropriate for NLH in setting its 2004 test year revenue requirement. (Brief of Argument, NP, pgs B-32/6-24; B-33/1-5)

The CA indicated that the Board should look to the rate of return first and foremost. If the low rate of return is provided, the CA submitted there is no need for a productivity allowance. (Transcript, Jan. 16, 2004, pg. 63/16-23)

The IC argued that the considerations which led to the Board imposing a productivity allowance in Order No. P. U. 7(2002-2003) apply even more forcefully today by reason of NLH's position that its business process improvement project has decreased and will continue to decrease NLH's costs. The IC concluded that the productivity allowance should be in the range of $5,000,000. (Written Argument, IC, pg. 15)

When questioned during the course of the hearing on what efficiencies were achieved in implementing the productivity allowance, NLH stated that the Board gave no specific direction as to which expenditures were to be reduced. (Pre-filed Evidence, J. C. Roberts, pg. 2/24-25) This was confirmed in the testimony of Mr. Wells who stated in cross-examination by the IC that:

> A. (Mr. Wells) ...the Board at the time of making the order with respect to productivity allowance, didn't know exactly whether that would be going into a group of costs that really could take that productivity allowance, or whether they could not. It was not a precise thing. It was just an approach that was intended to send a message to Hydro that we have to be able to explain, to their satisfaction, where we are on performance. And they didn't break it down as to whether it was salaries and fringe benefits, system equipment maintenance or insurance and other costs....
>
> (Transcript, Oct. 9, 2003, pgs. 118-119)

Mr. Wells went on to explain that when Order No. P. U. 7(2002-2003) was issued NLH was halfway through its year and its plans were in place.

Grant Thornton noted the Board gave NLH the discretion to allocate this productivity allowance among the various expenditure categories. However, in order to expedite finalization of the 2003 revenue requirement, NLH presented the $2,000,000 allowance as a separate line item in the 2002 final test year forecast. (Grant Thornton 2003 General Rate Hearing Report, pg. 37/25-30)

The Board remains uncertain as to the impact on NLH of the $2,000,000 productivity allowance ordered in Order No. P. U. 7(2002-2003). The Board does not accept the implication by NLH that the productivity allowance was treated in the way it was because the Board was not more prescriptive in how expenditures were to be reduced. The Board believes such specificity would be an encroachment on the management of NLH. While the Board allowed NLH the discretion to allocate this productivity allowance, it does not exonerate NLH from the reasonable regulatory expectation of demonstrating to the Board in its Application what efficiencies were generally achieved.

The Board acknowledges NLH's effort with respect to the business improvement process initiated in 2002 and described by Mr. Wells in testimony as set out above. However, it is not clear from the evidence how the results of the business improvement process will result in long term savings and productivity gains for the various aspects of NLH's operations. In reviewing the record the Board notes the following:

- There was no description of Covenco, its qualifications, experience or reputation in the business management field offered by NLH;
- Covenco did not provide any written reports to NLH;
- there were no written terms of reference provided to Covenco; and
- there were no targets established in respect of the cost benefits to NLH as a result of Covenco's engagement.

From the Board's perspective the outcome of this initiative remains uncertain and the fact that the process is continuing is insufficient reason in and of itself to reject a productivity allowance. Grant Thornton suggested during the hearing there was considerable evidence put before the Board respecting the topic of key performance indicators (KPIs) and a number of related topics including operating efficiencies, business process improvements initiatives and a productivity allowance. Grant Thornton observed that all these topics are related and should be viewed that way from a regulatory perspective. Grant Thornton concluded KPI targets for 2004 have not been established and a more transparent linkage between process improvement initiatives and the key performance measures may assist the Board in effectively monitoring NLH's operating performance and efficiency. (Supplementary Evidence, Grant Thornton, Dec. 5, 2003, pgs. 1/11-17; 1/28-30; 2/1-3)

With a view to the 2004 test year revenue requirement, the Board has assessed each line item in rendering its determinations. The Board is also cognizant of the financial impacts on this revenue requirement of its decision on ROE. The Board will not impose a productivity allowance for the 2004 test year and accepts NLH's argument that to do so would operate as a disincentive and a penalty in light of measures being put in place to monitor and report on productivity and performance. In accepting this argument, however, the Board shares the view expressed by Grant Thornton that issues involving KPIs, business improvement processes and productivity are all related and should be dealt with in that way from a regulatory perspective. With this in mind the Board has considered productivity/efficiency as part of an integrated perspective on Regulatory Oversight – Planning, Performance Measure and Reporting contained in Part II - Section X of this Decision and Order.

The Board will not impose a productivity allowance for NLH's 2004 test year revenue requirement in light of other decisions taken in this Decision and Order.

IV. RATE STABILIZATION PLAN

1. Introduction

The Rate Stabilization Plan (RSP) is established for two of NLH's customers – NP and the Island Industrials – to smooth rate impacts for certain variations between actual results and test year COS estimates for (i) hydraulic production, (ii) No. 6 fuel cost used at NLH's Holyrood generating station, (iii) customer load (NP and Island Industrials), and (iv) rural rates. Issues surrounding the RSP were canvassed extensively during NLH's 2001 general rate hearing and the Board made a number of findings and orders regarding the RSP in Order No. P. U. 7(2002-2003).

2. Order No. P. U. 40(2003)

On December 16, 2003 the Board issued Order No. P. U. 40(2003) (Appendix J) approving amendments as of January 1, 2004 to the RSP with respect to the current rules in the existing rates schedules as well as recovery of historic plan balances. The only outstanding issue that was not addressed in the Order is ongoing monitoring of the RSP.

3. Ongoing Monitoring

Since the changes to the RSP increase the level of complexity of the plan and may cause increased volatility in rates, Grant Thornton suggested that the Board consider the appropriate reporting requirements to permit effective monitoring, including the impact on customers. (Supplementary Evidence, Grant Thornton, Dec. 5, 2003, pgs. 4-5) NLH acknowledged that the modified RSP may result in more volatility in customer rates. (Supplementary Evidence, S. D. Banfield, Nov. 21, 2003, pgs. 6/26-31; 7/1-3) Grant Thornton recommended that NLH be directed to undertake a review of the new plan after a 24-month period. This review should assess the effectiveness of the new plan along with customer impact and reaction, and determine whether any modifications are appropriate. (Supplementary Evidence, Grant Thornton, Dec. 5, 2003, pgs. 4-5)

The Board agrees that ongoing monitoring of the RSP is necessary to ensure that the plan is operating as intended in light of the changes approved in Order No. P. U. 40(2003). The Board also agrees with the recommendation of Grant Thornton that the RSP should be comprehensively reviewed after a 24-month period. As part of its ongoing regulatory supervision the Board may address additional reporting and review requirements for NLH's quarterly regulatory and annual reports. NLH will also be required to undertake a review of the operation of the RSP for the period January 1, 2004 to December 31, 2005. This review should assess the effectiveness of the revised RSP, including an assessment of the impact on customers in terms of rates based on the outstanding plan balance as of December 31, 2005.

The Board will direct NLH to complete a review of the operation of the RSP for the period January 1, 2004 to December 31, 2005. A report on this review setting out an assessment of the impact on customers should be filed with the Board no later than June 30, 2006.

V. RATE BASE

1. Fixing and Determining Rate Base

NLH's rate base is comprised of net capital assets in service, fuel inventory, supplies inventory, deferred foreign exchange losses and rate hearing costs, as well as an allowance for cash working capital.

In Order No. P. U. 21(2002-2003), arising from Order No. P. U. 7(2002-2003), the Board fixed and determined NLH's forecast test year rate base for 2002 at $1,359,570,000 and allowed a return on rate base for NLH based on the 2002 test year of 7.081%. NLH's average realized rate base for 2002 was $1,356,207,000. (Revised Evidence, J. C. Roberts, Schedule III, Aug. 12, 2003, pg. 1) In its 2002 Annual Financial Review of NLH Grant Thornton confirmed that the calculation of average rate base for 2002 is in accordance with established practice and Order No. P. U. 7(2002-2003). (Information #3, pg. 5)

Although NLH did not request in its Application that the Board fix and determine the 2002 rate base pursuant to Section 78 of the *Act* this would be considered normal regulatory practice. Grant Thornton also suggested that since this is the first time that NLH's actual rate base will be fixed and determined, the Board should consider whether a valuation of the rate base pursuant to Section 64 of the *Act* would be appropriate or necessary. (Grant Thornton 2003 General Rate Hearing Report, pg. 22/3-5)

In response to PUB-110 NLH submitted that the legislative direction found in subsection 17(2) of the *Hydro Corporation Act,* stated below, precludes and obviates a valuation of its rate base under Sections 64 and 68 of the *Act*:

> *"(2) For all purposes of the Public Utilities Act, the rate base of the corporation shall include the property and assets of the corporation at their net book value but excludes investments in subsidiaries of the corporation."*

NLH stated that it followed this provision in its 2001 general rate application when it first applied for approval of its rate base and is following this provision again in this Application.

Board Hearing Counsel suggested an alternative interpretation of Section 17(2) of the *Hydro Corporation Act* could lead to the conclusion that those assets which are deemed to be used and useful are to be added at their net book value as opposed to some other measure, such as original cost. This alternative interpretation of Section 17(2) would require NLH to demonstrate that an asset is used and useful prior to its being added to the rate base. Finally Board Hearing Counsel pointed out that, regardless of the interpretation of Section 17(2), it is necessary to fix and determine NLH's rate base effective on commencement of the regulation of the utility and that all subsequent additions to plant can then be reconciled to this starting point. (Final Submission, Board Hearing Counsel, pg. 20)

The intervenors did not make submissions on NLH's argument regarding the valuation of its rate base and the applicability of Section 17(2) of the *Hydro Corporation Act.*

Pursuant to Section 80 of the *Act* a utility is entitled to earn a fair return on the rate base as fixed and determined by the Board. One of the primary responsibilities of the Board is to fix the amount of the rate base on which a utility is entitled to earn a return. As the amount of the rate base is the basis for the rate of return the determination of the rate base is a fundamental part of the regulation of the utility. A relatively small change in the rate base can significantly impact revenues which are collected from customers. The Board therefore must always be cognizant of its mandate with respect to the determination of rate base.

The rate base is fixed and determined by the Board pursuant to Section 78 of the *Act* and includes the property and assets of the utility as determined by valuation plus other specific amounts allowed by the Board. The valuation is conducted pursuant to Section 64 of the *Act*, which allows the Board to inquire into and determine the extent, condition and value of the whole or a portion of the property and assets of a public utility used and useful in providing or supplying a particular service to or for the public. The Board notes that in the late 1950's and early 1960's the Board conduced a valuation prior to fixing and determining the property and assets of NP or its predecessor companies.

As set out earlier, NLH argued in PUB-110 that Section 17(2) of the *Hydro Corporation Act "precludes and obviates"* a valuation of NLH's rate base. The Board does not agree. Section 17(2) does not *"preclude"* the Board from conducting a valuation under Section 64. The *Act* gives the Board the clear authority to conduct a valuation and nothing in subsection 17(2) prevents the Board from conducting this valuation. The difficult question is whether Section 17(2) *"obviates"* or makes unnecessary a valuation under Section 64. That would be the case if in all instances Section 17(2) requires all the property and assets of NLH as determined by NLH to be included in the rate base at their net book value. The Board is not satisfied that this Section goes this far.

The Board concludes that, given the importance of the rate base to the regulatory process, the Board must have jurisdiction to determine the components and value of the rate base to the extent that the language of Section 17(2) will permit. The Board notes Section 118(2) of the *Act* which states that the Board shall have all the powers necessary and incidental to carry out the powers specified in the *Act*. The Board concludes that the language of Section 17(2) of the *Hydro Corporation Act* leaves jurisdiction with the Board to carry out its mandate with respect to the review of the rate base. For example, the provision does not say that *"all"* of the property and assets as determined by NLH shall be included in the rate base. Rather it could be read to say that property and assets which are included in the rate base shall be included at their net book value. The provision seems to allow for circumstances where there may be property and assets which are recorded in the financial records but are not used and useful because they are obsolete or they cannot be found. An example of this scenario was presented in this hearing when NLH sought to write-off assets recorded in the financial records with a net book value of $800,000 which could not be matched to assets in the field. The Board therefore concludes that it has the authority to conduct a valuation under Section 64 of the *Act* with respect to the property and assets of NLH and further that there may be circumstances where the Board will find that such a valuation is necessary and appropriate.

While this issue was raised during the hearing, no party to this hearing suggested that a valuation was necessary or appropriate for the determination of the rate base. No evidence was presented to challenge the 2002 rate base as proposed by NLH.

Given the extensive effort and costs associated with conducting a valuation under Section 64, the Board finds that it is not appropriate to order a valuation in the context of little or no evidence to suggest that one is necessary and appropriate in the circumstances.

The Board notes that NLH advised during the hearing that it has undertaken a process review to match all the physical plant records to the equipment in the field. (Transcript, Oct. 16, 2003, pg. 61/15-20) Mr. Wells stated that this matching does involve some determination as to whether an asset is used and useful but that this is not the primary purpose of the review, which he indicated as being "*…to match financial records with equipment records and to identify any differences and make the appropriate adjustments if deemed necessary.*" (Transcript, Oct. 16, 2003, pg. 65/10-13) Once this review has been completed NLH should have a comprehensive up-to-date list of all of its property and assets. The Board views this effort as a necessary first step to consideration as to whether a valuation of the property and assets is necessary since it will match the financial and field records and detail the property and assets which should, in NLH's view, be part of the rate base.

Since this review should provide better evidence as to whether a valuation is necessary, NLH will be required to file with the Board no later than its next general rate application a report detailing the results of the process review of its property and assets. This report should set out a list of its property and assets, the acquisition date, the original cost, the purpose of the asset, the net book value and, where applicable, the load served. The Board will consider the issue as to whether a valuation of the property and assets of NLH is necessary and appropriate at NLH's next general rate application.

Given that there were no submissions or evidence challenging the 2002 rate base as proposed by NLH and that the Board's financial consultant confirmed that the accounts are in accordance with established practice, the Board finds that the 2002 rate base of $1,356,207,000 should be fixed and determined. Further given that there was insufficient evidence with respect to the necessity of a valuation and, in light of the fact that NLH is conducting a process review to match its financial and equipment records, the Board will require NLH to file a report as to its property and assets.

The Board will fix and determine the 2002 rate base at $1,356,207,000.

The Board will require NLH to submit, as part of its next general rate application, a report with respect to the review of its property and assets setting out the acquisition date, the original cost, the purpose of the asset, the net book value and, where applicable, the load served.

2. Forecast Average Rate Base and Return on Rate Base

The forecast average rate base for 2003 is $1,427,552,000 and for the 2004 test year the forecast average rate base is $1,483,381,000. (Revised Evidence, J. C. Roberts, Schedule III, Oct. 31, 2003, pg. 1)

The 2004 forecast average rate base is as shown below:

2004 Forecast Average Rate Base ($000)	
Capital Assets	$1,940,513
Less: Contributions in Aid of Construction	85,906
Accumulated Depreciation	494,881
Muskrat Falls Assets	2,010
Assets not in Service	74
Net Capital Assets	1,357,642
Net Capital Assets Previous Year	1,371,366
Average Capital Assets	1,364,504
Cash Working Capital Allowance	3,084
Fuel Inventory	14,520
Supplies Inventory	19,387
Deferred Realized Foreign Exchange Loss plus PUB Costs	81,886
Average Rate Base	**$1,483,381**

(Revised Evidence, J. C. Roberts, Schedule III, Oct. 31, 2003)

Grant Thornton reviewed the calculation of NLH's forecast average rate base for the 2004 test year and confirmed that the calculations are reasonable and appropriate in reference to legislative guidance, normal regulatory practice and existing Board Orders. (Grant Thornton 2003 General Rate Hearing Report, pg. 22)

There has been a net increase of $135,260,000 in average capital assets in service from 2002 to 2004, primarily due to the Granite Canal project ($134,550,000) and the 2003 and 2004 capital projects. (IC-257) This has been offset by reductions in average fuel and supplies inventory balances, cash working capital allowance and deferred charges balances. (CA-127; Revised Evidence, J. C. Roberts, Schedule III, Oct. 31, 2003)

NLH was also directed in Order No. P. U. 7(2002-2003) to provide a study of the implications upon cash working capital allowance of the timing difference between the payment of semi-annual long-term bond interest and the receipt of the funds for their payment. This report was filed in this proceeding. (Exhibit JCR-1) The report concludes that NLH's current method of forecasting interest expense and the cost of debt already reflects the timing of semi-annual interest payments and recommended continuation of the current methodology for the determination of NLH's cash working capital allowance. Both Grant Thornton and Ms. McShane supported NLH's recommendation that the current methodology for calculating the cash working capital allowance be continued. (Grant Thornton 2003 General Rate Hearing Report, pg. 22; Pre-filed Evidence, K. C. McShane, pgs. 3-4)

In final argument (pg. C-2) NP submitted that the Board should rely on the revised forecast average rate base of $1,483,381,000 in determining NLH's revenue requirement for the test year and, if the Board orders NLH to reduce its forecast capital expenditures, it should also require NLH to make the appropriate adjustments to its forecast average rate base.

NLH's return on rate base is calculated by applying its weighted average cost of capital (WACC) to its rate base, excluding rural assets, and its weighted average cost of debt to the rural assets component of the rate base. The inputs into WACC are described in Grant Thornton's 2003 General Rate Hearing Report (pg.16/2-6) as the average forecast capital structure and the forecast cost of the individual components of invested capital, both debt and retained earnings. The forecast return on rate base for 2004 is $116,829,000 or 7.88% calculated as shown below:

2004 Forecast Return on Rate Base ($000)				
Component Base	**2004**	**Weighted Average Cost of Debt**	**Weighted Average Cost of Capital**	**Return on Rate Base**
Rural Interconnected and Isolated Assets	213,447	6.852%		14,625
Other Rate Base Assets	1,269,934		8.048%	102,204
Average Rate Base	**1,483,381**			**116,829**

(Revised Evidence, J. C. Roberts, Schedule IV, Oct. 31, 2003)

NLH's rate of return on rate base from 2000 to 2004 was outlined in Grant Thornton's 2003 General Rate Hearing Report (pg. 21) as follows:

Rate of Return on Rate Base						
	2000	**2001**	**2002**	**Test Year 2002**	**Forecast 2003**	**Forecast 2004**
Rate of Return on Rate Base (%)	7.69	7.79	7.25	7.08	6.31*	7.88%**

* Revised Evidence, J. C. Roberts, Schedule III, Oct. 31, 2003, pg. 1
** adjusted as referenced above.

Grant Thornton concluded in its report (pg. 22/25-28) that NLH's calculation of the return on average rate base is in accordance with established practice and Order No. P. U. 7(2002-2003).

NLH submitted that its rate base and the return on rate base should be approved as filed, subject to any adjustments ordered by the Board for capital budget underspending and the Board's decision with respect to approval of additional capital expenditures requested by NLH on November 21, 2003. (Final Argument, NLH, pg. 50/7-10)

The Board is satisfied that the approach and methodology used by NLH in calculating its average rate base and return on rate base for the 2004 test year is appropriate. The Board accepts

NLH's proposals, subject to any adjustments required as a result of this Decision and Order and the Board's Order No. P.U. 5(2004) issued February 5, 2004 approving additional 2004 capital expenditures for NLH.

The Board will require NLH to file a revised calculation of rate base and rate of return on rate base for the 2004 test year which reflects the findings of the Board in this Decision and Order.

3. Range of Return on Rate Base and Excess Earnings Account

In the interest of regulatory consistency with NP, Grant Thornton recommended that the Board consider establishing an allowed range and upper limit of rate of return on rate base for NLH and instruct NLH to establish an *"excess earnings account"* to deal with any earnings generated in excess of the upper limit as prescribed. Grant Thornton addressed this issue in both its pre-filed (pg. 22/21-23) and supplementary (pg. 5/21-24) evidence. Grant Thornton suggested that, while the Board should assess this range in the context of its findings on other related financial matters, NP's range of rate of return may be an appropriate starting point for setting a range of return on rate base for NLH, which could be adjusted to reflect other Board decisions. (Supplementary Evidence, Grant Thornton, Dec. 5, 2003, pg. 5/26-30)

In commenting on Grant Thornton's evidence, NLH pointed out there was no evidence from any of the financial experts on an appropriate range of return on rate base and that it would be premature for the Board to accept these recommendations in advance of this Order. NLH argued it should be asked to provide its opinion on both the range of rate of return on rate base and on an excess earnings account once the Board has made its decision on the fair and reasonable return for NLH. (Final Argument, NLH, pgs. 50/24-30; 51/5-16)

NP suggested there is insufficient evidence to enable the Board to determine an appropriate range of rate of return on rate base for NLH, particularly when differences between the utilities may require a different range. NP submitted the preferable approach would be for the Board to deal with all related issues, including the range of return on rate base, an excess earnings account and an automatic adjustment formula when NLH brings forward an integrated financial proposal. (Brief of Argument, NP, pgs. C-20/13-22; C-21/16-18)

The IC did not support a range of rate of return on rate base but did support the establishment of an excess earnings account to be disposed of by direction of the Board either annually or upon achievement of a specific target amount. (Written Argument, IC, pgs. 11-12)

Board Hearing Counsel submitted that, whichever methodology is used to calculate NLH's cost of capital, the Board may wish to consider implementing an approved range of rate of return on rate base and excess earnings account which would function similarly to that used to regulate NP. Board Hearing Counsel observed this approach would provide NLH with some financial flexibility. (Final Submission, Board Hearing Counsel, pgs. 7/8-23; 8/1-4)

The Board agrees that little evidence was presented on the issue of range of return on rate base and an excess earnings account during the hearing but points out those have been in operation for quite some time in regulating NP. The Board clearly has the authority to deal with excess earnings of the utility and in that regard the authority to establish a range of return on rate base as well. The findings from the Stated Case support the Board's jurisdiction in this area. On the question of whether the Board has jurisdiction to set the rate of return as a range of permissible rates of return, the Court stated:

> *"[68] It is to be noted that s-s. 80(1) does not speak in terms of a "rate" or "rates" of return; rather, it speaks of a just and reasonable "return". It is not limited by its language to the pinpointing of a particular rate of return. I conclude that a liberal construction of the word "return" in the context of s-s. 80(1) leads to the conclusion that it can include a range of rates of return.*
>
> *[69] Of course, in applying the rate of return to the rate base, as ascertained by the Board, a single figure will have to be used since rates, tolls and charges are expressed as finite numbers. The Board in practice has chosen the mid-point of its stated range of rates of return as the figure to be used for this purpose. This is a perfectly acceptable practice for the purpose of setting the rates. By expressing a range, however, the Board leaves open to the utility the flexibility of earning more than the mid-point up to a maximum end of the range so as, in effect, to give the benefit of the doubt to the utility that the expert evidence favouring the upper end of the range turns out to be more accurate and to provide an incentive to the utility towards managerial efficiency."*

On the question of the scope of the Board's powers to deal with situations where a utility in fact earns a rate of return that is greater than that determined to be a just and reasonable return, the Court stated:

> *"[74] If, as determined in the answer to Question 1, the Board has jurisdiction flowing from s-s. 80(1) to prescribe the maximum rate of return which a utility may earn in a given year, it is a necessary consequence of such a determination that revenue earned in excess of the maximum of the prescribed range of return is excess revenue to which, by definition, the utility will not be entitled. The Board accordingly must have jurisdiction to regulate how that excess revenue is to be dealt with."*

Indeed, it may be argued that failure to establish a range of return on rate base and an excess earnings account would create uncertainty as to the treatment of any earnings in excess of the allowed rate of return ordered by the Board. The Board believes that eliminating any uncertainty by dealing with this issue now will promote stability and predictability for both ratepayers and NLH.

As noted above the Board has the authority and responsibility to deal with the disposition of any *"excess earnings"* generated by NLH. In this regard the Board has the flexibility to consider the facts and circumstances giving rise to the *"excess earnings"* and take these into consideration in ordering the disposition of same. The use of a range of return can be an incentive to NLH to seek efficiencies and productivity improvements that will benefit ratepayers through lower rates in the future. To the extent excess earnings may be generated from productivity initiatives the Board may consider this when dealing with the disposition of those excess earnings.

The Board concludes that a consistent approach with respect to using a range of rate of return on rate base and an excess earnings account is a practical and effective method of regulating both NLH and NP in the future. The determination of an appropriate range for NLH must be made within the context of NLH's Application, in particular its financial parameters (e.g. capital structure, ROE, WACC, interest coverage, etc.), and within the context of the Board's findings in this Decision and Order. However, the Board is not satisfied that there is sufficient evidence to set a specific range for NLH's return on rate base as of this Decision and Order and will require NLH to file a proposal for the Board's consideration.

As part of its revised filing of rate base and rate of return on rate base NLH will be required to file for the Board's consideration a proposal for a range of return on rate base and a definition of an *"excess earnings"* account. This proposal should include an analysis of several alternate ranges along with the associated impacts.

4. Automatic Adjustment Formula

The Automatic Adjustment Formula (AAF) is used by the Board to annually adjust NP's rate of return following the test year until its next general rate application. Grant Thornton recommended that, in the interests of regulatory efficiency and consistency with NP, the Board should also address whether implementation of an AAF is appropriate for NLH at this time. Grant Thornton also suggested that, if the Board finds that an AAF is appropriate, the Board should request NLH to file a proposal detailing how implementation could be achieved for 2005. (Supplementary Evidence, Grant Thornton, Dec. 5, 2003, pg. 6/6-14)

In its response to CA-169 and NP-105 NLH stated that an automatic adjustment mechanism may be appropriate at such time as the rate structure permits the indicated change in revenue requirement to be easily distributed across rate classes. In final argument, NLH submitted that no financial expert provided evidence on this issue but suggested the application of an AAF would be appropriate following the determination of an appropriate ROE for NLH. NLH proposed that the issues of a range of return on rate base and an excess earnings account be dealt with at the same time. (Final Argument, NLH, pgs. 51/24-27; 52/1-6)

The CA expressed concerns about the ability of the Board to monitor an AAF without the Board having the legislative jurisdiction to provide a remedy against over-earning on equity. The CA argued consumers would only agree to the construction of a formula, both for NP and NLH, if legislation is amended to move from rate base regulation to regulation based on equity; otherwise the Board should rescind use of any formula immediately. (Final Submission, CA., pg. 42)

NP commented that integrated proposals for dividend policy, capital structure, rate of return on equity, rate of return on rate base, range, excess earnings account and AAF are required to fully address the financial position of NLH. NP argued all of these items are important components in the regulation of NLH as a Crown owned utility. NP's preferred approach is to deal with the AAF, the range of return on rate base, and the excess earnings account based on an integrated proposal from NLH. (Brief of Argument, NP, pg. C-21/16-18)

In noting Grant Thornton's evidence, Board Hearing Counsel observed the AAF has applied to NP since 1998 and considerable effort was directed during NP's 2003 general rate application toward improving its operation. While certain lessons can be learned from the operation of NP's AAF, Board Hearing Counsel cautioned there was little direct evidence led during the hearing on how an AAF would be implemented in the context of NLH's financial parameters. Board Hearing Counsel concluded the Board could consider directing NLH to submit an AAF proposal by mid-2004 in order to allow ample time for its review by the Board's financial advisor and its implementation in the Fall of 2004. (Final Submission, Board Hearing Counsel, pgs. 8/6-20; 9/1-3)

The Board agrees that, in the interests of regulatory consistency and efficiency, an AAF should be considered for NLH. However, the Board is not satisfied that there is sufficient evidence as a result of this hearing to implement an AAF as of this Decision and Order. The Board notes that the existing formula to adjust the rate of return on rate base for NP was accepted and implemented by the Board following a full cost of capital hearing at which specific evidence regarding the appropriateness and the structure of an automatic adjustment mechanism was reviewed. The resulting formula adopted by the Board in Order No. P. U. 16(1998-99) reflects the complex relationship between rate of return on rate base and the cost of the various components of the capital structure of NP. In the Board's opinion such a mechanism to automatically adjust NLH's rate of return on rate base would be similarly complex and would have to be designed to reflect the costs specific to NLH. Given the uncertainty surrounding NLH's forecast capital structure over the short-term, and in light of the Board's decision with respect to the ROE to be used in rate setting, the Board is not convinced that it is necessary or that there are any clearly discernable benefits to be gained by putting an AAF in place as of this Decision. The Board does agree that, in the future, an AAF should be considered and NLH should submit a proposal at the time of its next general rate application for consideration by the Board.

The Board will not implement an automatic adjustment mechanism for NLH's rates at this time. NLH will be required to submit a report containing a proposal for such a mechanism with analysis as to the impacts for consideration at its next general rate application.

VI. COST OF SERVICE

1. Introduction

NLH filed its Application using the generic Cost of Service (COS) methodology recommended by the Board as a result of the 1992 generic COS hearing, as modified and finalized in Order No. P. U. 7(2002-2003). As directed by the Board NLH prepared separate COS studies for each of the five systems it serves: Island Interconnected; Island Isolated; Labrador Isolated; L'Anse au Loup; and Labrador Interconnected. NLH has confirmed that since its 2001 general rate hearing there have been no changes to any of the systems that would affect the COS studies, with the exception of the Island Interconnected System. The changes and additions to the Island Interconnected System affecting the COS study result primarily from reconstruction and upgrades of specific transmission assets and also from the addition of new generation capacity at Granite Canal, Abitibi Consolidated Company of Canada - Grand Falls, and at Corner Brook Pulp and Paper Limited. (Pre-filed Evidence, J. R. Haynes, pgs. 39-40)

In its Application NLH proposed three minor changes to the COS methodology:

1. Hydro Place costs should be assigned to all systems.
2. General plant assets should be functionalized on the basis of direct generation, transmission, distribution and customer expenses rather than plant ratios.
3. NLH's municipal taxes and Board assessments should be assigned the same functionalization and classification distribution as the sub-total of the COS for each class, excluding revenue-related.

The Mediation Report (Appendix H) identified the following COS issues as issues on which the parties agree:

> *" a. Hydro's cost of service (COS) study filed in this proceeding is in general compliance with Board Orders, specifically the June 7, 2002 Order No. P. U. 7(2002-2003), regarding the use of embedded cost of service studies as a guide in determining the revenue requirement increases or decreases to be applied to each class.*
>
> *b. Hydro Place costs should be assigned to all systems as proposed by Hydro.*
>
> *c. General plant assets should be functionalized on the basis of direct generation, transmission, distribution and customer expenses rather than plant ratios.*
>
> *j. Hydro's Municipal Taxes and Board Assessments should be allocated based on revenues."*

Although not raised by NLH in its Application, the following COS issues were identified as those on which the parties disagree:

> *"l. Should Burin Peninsula assets be assigned to common?*
>
> *m. Should GNP generation assets be assigned to common?*
>
> *o. What is the appropriate treatment of NP thermal Generation in Hydro's COS and rates charged to NP (e.g., NP Generation Credit)?"*

The Board has reviewed the Mediation Report and the evidence filed with respect to COS issues on which there were agreement. The Board concludes the proposed changes to the COS methodology as agreed in the Mediation Report are reasonable.

The Board accepts the proposed changes to the COS methodology with respect to the assignment of Hydro Place costs, NLH's municipal taxes and Board assessments, and with respect to the functionalization of general plant assets.

The outstanding COS issues regarding plant assignment and the treatment of NP's generation are discussed below.

2. Assignment of Great Northern Peninsula, Burin Peninsula and Doyles -Port aux Basques Assets

The COS study filed in this proceeding assigns all generation and transmission assets of the Great Northern Peninsula (GNP), Doyles-Port aux Basques and the Burin Peninsula as ordered by the Board in Order No. P. U. 7(2002-2003). The GNP generation and transmission assets are specifically assigned to Hydro Rural, the Doyles-Port aux Basques transmission assets are specifically assigned to NP, and the Burin Peninsula transmission assets are assigned to common.

In Order No. P. U. 7(2002-2003) the Board made the following determination regarding the assignment of the GNP, Burin Peninsula and Doyles-Port aux Basques assets (pg. 113):

> *"Based on the evidence before it in this hearing the Board is not prepared to confirm the change in assignment from NLH rural to common of the generation and transmission assets on the GNP. The proposed change in the assignment of the Doyles-Port aux Basques assets from NP specifically assigned to common is also not accepted. The Board will require NLH to undertake the necessary studies and analyses to support the value of the interconnection of the GNP assets to the grid, including an assessment of the impacts on system reliability and the conditions and operating scenarios under which the GNP generation would be of benefit to the operation of the Island Interconnected system. This study should also review the value of the Doyles-Port aux Basques and the Burin Peninsula systems to the grid."*

NLH filed with its Application a study Review of COS Assignment for the GNP, Doyles-Port aux Basques, and Burin Peninsula Assets. (Exhibit JRH-3) NLH's COS expert Mr. Greneman summarized the conclusions of the study as:

- *"All generation assets on the GNP should be reassigned from rural to common since they act to enhance reliability of the system;*
- *Transmission assets related to the GNP and Doyles-Port aux Basques remain specifically assigned to Hydro Rural based on the fact that they are radial lines with generation of less than sufficient magnitude to justify their assignment to common;*
- *Transmission assets on the Burin Peninsula continue to be assigned to common as they serve more than one customer (NP and Hydro Rural)."*

Mr. Greneman stated that, based on his review of the report, the principles relied on are consistent with those commonly used in the industry to evaluate whether an asset should be treated as common or directly assigned. (Pre-filed Evidence, R. D. Greneman, pg. 10/18-21)

As the parties and experts have put forth differing opinions with respect to the outstanding COS issues the Board will consider each separately. While the Mediation Report does not identify the question of the cost assignment of the Doyles-Port aux Basques transmission assets as a point of disagreement, the Board will address this issue below since it was discussed in Order No. P. U. 7(2002-2003).

GNP Generation Assets

Based on the study undertaken, NLH proposed maintaining the following guideline for the assignment of its generation assets to common as proposed during its 2001 general rate hearing and all previous referrals before the Board. (Exhibit JRH-3, pg. 16):

"The following facilities will be assigned as Common Plant:

- *All of Hydro's production facilities (hydraulic, thermal, gas turbine and diesel)"*

Common plant is defined as plant that is of substantial benefit to more than one firm customer. Costs for common plant are assigned to all customers of the system. If the Board accepts NLH's proposal the assignment of the GNP generation assets will change from being specifically assigned to Hydro Rural as in the COS study to being assigned to common plant, with costs assigned among all customers.

In final argument NLH submitted that the evidence demonstrated that the generation on the GNP has been used to benefit customers on the Island Interconnected System. NLH also stated that if the GNP generation were not available to the Island Interconnected System the need for new capacity would be advanced from 2011 to 2009. If the Board determines that the GNP generation assets should be assigned as Rural, NLH suggested that consideration should be given to providing a generation credit to Hydro Rural customers, as is the case with NP. (Final Argument, NLH, pg. 57/25-30)

The IC disagreed with NLH's position with respect to GNP generation assets stating that, absent the GNP interconnection, the customers on the Island Interconnected System would have better reliability than they have today. To support this assertion the IC pointed to the evidence in IC-399, which shows the Loss of Load Hours (LOLH) and energy balance in the hypothetical scenario in which the GNP was not interconnected. Under this scenario the Island Interconnected LOLH and the energy balance would both improve and the requirement for future generation additions to the Island Interconnected grid would be delayed from 2010 until 2012. The IC stated in final argument (pg. 22):

"Despite this reduction in service quality by reason of the GNP Interconnection, the approach proposed by Hydro results in about $190,000 in extra costs to the IC group. This added cost to the Industrial Customers group as a result of a project that is designed to provide service to rural customers (at the expense of the Island Interconnected grid) is not appropriate and contrary to

> *the provisions of the EPCA 1994 which prohibit charging Industrial Customers for the costs to serve rural customers."*

The IC also argued that the appropriate test for allocation of resources to common versus specifically assigned is not simply *"do they provide benefits to the Island Interconnected customers"* but also *"what is the appropriate allocation to track the relative benefits received"*. The IC submitted that the evidence shows that the GNP generation is dispatched to primarily support the rural customers in the GNP area, stating: "*The frequency of the use of the GNP generation reflected in the evidence indicates that, since interconnection, the GNP generation has been commissioned 117 times (98% of the dispatch) for local support and back-up and 3 times for system support (2% of the dispatch).* NLH's allocation approach however results in NP and the IC being assigned over 90% of the costs of these units which, according to the IC, is not consistent with the principle of cost allocation tracking the benefits received. (Written Argument, IC, pg. 23) The IC submitted that: *"The GNP generation cannot be viewed to comprise a "substantial benefit" to customers other than the Hydro Rural customers for which this generation serves as local back-up so as to warrant common assignment and the corresponding additional costs of approximately $190,000 per annum to the Industrial Customers."*

NP submitted that all generation assets connected to the Island Interconnected System provide substantial benefit to the Island Interconnected System and agreed with NLH's proposal to assign GNP generation assets to common. In final argument NP stated that all generation assets on the Island Interconnected System benefit all customers by deferring capacity additions to the system, regardless of their location. As well NP submitted that recent events on the Island Interconnected System have demonstrated the benefits of the GNP generation in meeting system peak requirements and assisting system restoration efforts. (Brief of Argument, NP, pg. D-4)

The CA and EES Consulting both agreed with NLH's proposal to assign GNP generation as common plant.

In making its determination the Board finds the information presented in Table 3-2 and Table 3-3 of Exhibit JRH-3 particularly helpful. These tables compare the near term capability requirements for the Island Interconnected System with and without the GNP, Burin Peninsula and Doyles-Port aux Basques assets in the generation mix. When each of these generation assets is removed from the generation mix the timing of capacity deficits on the interconnected system is advanced by two to four years. The combined effect of removing all the assets advances the timing of capacity deficits from 2011 to 2004. The Board agrees with the conclusion stated in NLH's report "*…from a generation planning point of view the value of these assets is in their contribution to the overall reliability of the generation system with the resultant impact on resource decisions of the past, and as illustrated in Table 3-3, resource decisions yet to be made. This contribution is to the benefit of all customers on the Island Interconnected system."* (Exhibit JRH-3, pg. 13)

The generation assets on the GNP were originally constructed to serve the isolated system. With the interconnection of the GNP these generation assets now serve as reserve capacity to the interconnected system. NLH includes in its overall system planning all generation connected to the system and available to be used regardless of the location of the generation source. (Transcript, Oct. 20, 2003, pgs. 188/10-25; 189/2-9) While the Board agrees with the IC that the GNP generation is used primarily for back-up generation and voltage support for NLH's rural customers on the GNP, it cannot discount the fact that the generation has been used (although on an infrequent basis) to support the interconnected system at times of system peak. (Transcript, Oct. 20, 2003, pgs. 190-192) In the Board's opinion, this fact, combined with the impact of the GNP generation assets on the timing of new capacity, supports the assignment of this plant to common.

The Board accepts NLH's proposed assignment of the generation assets on the GNP as common plant.

GNP Transmission Assets

NLH proposed the following guideline in determining the cost allocation for transmission assets (Pre-filed Evidence, J. R. Haynes, pg. 43):

"The following facilities will be assigned as Common Plant:

- *All of Hydro's transmission and terminal station plant, 66 kV and above, that is of substantial benefit to more than one customer;*
- *All of Hydro's transmission and terminal station plant whose sole purpose is the interconnection of a generating facility with the system. Transmission and terminal station plant in this category have their costs classified on the same basis as the generation that it interconnects; and*
- *All of Hydro's transmission and terminal station plant that connects a single customer and generation or voltage control equipment, that is of substantial benefit to more than one customer."*

In interpreting this guideline NLH proposed that factors such as historical assignment, primary function, and quantity of generation be weighed in determining the ultimate assignment of the transmission and terminal station assets.

NLH stated that, while the GNP generation is recommended to be assigned as common, the generation is not of sufficient magnitude to justify the assignment of the GNP transmission assets to common, given the dominant use of the transmission system to serve NLH's rural customers. (Exhibit JRH-3, pg. 21) For this reason NLH proposed that the GNP transmission assets be assigned to Hydro Rural.

The IC and NP supported NLH's proposed assignment of GNP transmission assets. The IC pointed out in final argument (pg. 24) that assignment of GNP transmission assets to common would result in an additional $1,109,000 of costs being allocated to the IC.

EES Consulting stated that generation facilities and associated transmission facilities should be assigned in a similar manner, since the benefits of the generation cannot be delivered without the associated transmission facilities. (Pre-filed Evidence, EES Consulting, Sept. 19, 2003, pg. 19) EES Consulting recommended that, as all customers on the Island Interconnected System benefit from the generation facilities on the GNP, and given that they would not receive the benefit without the GNP transmission, the transmission facilities should also be assigned common.

In its 1995 report the Board stated "*...the Board is struck by the inconsistency in the proposed treatment whereby Newfoundland and Labrador Hydro treats generation assets as common but the related transmission line is treated as specifically assigned.*" EES Consulting raised a similar issue in this hearing. NLH addressed the issue of assignment consistency in its report and concluded that remote generation and the connecting transmission and terminal station assets could logically be assigned differently in the COS, as are the thermal generation of NP and its connecting transmission and distribution lines, and on the basis of the difference in planning criteria for generation and transmission assets. (Exhibit JRH-3, pgs. 19-20)

The Board is concerned with the inconsistency in assigning the GNP generation assets as common with the associated transmission lines specifically assigned to Hydro Rural. In principle it would seem logical to assign the transmission plant that connects common generation plant to the interconnected system also as common plant since the generation cannot provide the benefit to the system without those transmission assets. The Board agrees with NLH that the difference in planning criteria for generation and transmission assets is a factor. While the GNP generation assets will delay the need for new capacity on the system no such argument can be made for the transmission assets. The benefit to the interconnected system of the generation arises by virtue of the local generation being able to carry some of the load on the GNP when required thereby reducing the GNP load from other generation sources on the grid. The Board agrees with NLH that these transmission assets can logically be assigned as proposed to Hydro Rural.

The Board accepts NLH's proposed assignment of transmission assets on the GNP to Hydro Rural.

Doyles-Port aux Basques Transmission Assets

NLH proposed continuation of the assignment of the Doyles-Port aux Basques transmission assets as specifically assigned to NP. This proposed treatment is similar to NLH's treatment of the GNP transmission assets.

The transmission assets of the Doyles-Port aux Basques system fall under the assignment guideline involving the connection of a single customer (NP) with remote generation or voltage support equipment to the Island grid. The primary purpose of these transmission assets is to provide service to NP's customers on that radial system. While the generation assets associated with that system are of value to all Island Interconnected customers, NLH submitted that these generation assets are not sufficient in magnitude to justify assignment of the transmission assets as common.

None of the intervenors argued that NLH's proposed assignment of the Doyles-Port aux Basques transmission assets was not appropriate.

EES Consulting recommended the Doyles-Port aux Basques transmission line be assigned common for the same reasons recommended for the assignment of the GNP transmission assets, that being both transmission lines connect generation to the interconnected grid.

NLH's proposed assignment of the Doyles-Port aux Basques transmission line is consistent with the assignment proposed for the GNP transmission assets as discussed above and accepted by the Board. This assignment recognizes that the transmission assets primarily serve NP's customers and hence should be assigned to NP. The benefit of NP's generation assets in the Port aux Basques area to the interconnected system is handled through the use of a generation credit in the COS.

The Board accepts NLH's proposed assignment of transmission assets on the Doyles-Port aux Basques system as specifically assigned to NP.

Burin Peninsula Transmission Assets

Since the Burin Peninsula transmission assets serve both NP and Hydro Rural customers and connect generation assets of NP to the grid, NLH proposed that these transmission assets continue to be assigned as common plant. Prior to the construction of the Paradise River hydroelectric facility in 1989 and the connection of Hydro Rural customers to this transmission system (Monkstown in 1988, Petite Forte in 1993, and South East Bight in 1998), the Burin Peninsula transmission assets were assigned to common plant on the basis of interconnecting significant generation located on the system. While NP is now relocating a 15 MW gas turbine off the Burin Peninsula, the connection of the Paradise River plant and of Hydro Rural customers to the transmission system is, according to NLH, justification for the continued assignment of this plant as common. (IC-291; Exhibit JRH-3, pgs. 21-22)

The IC argued that the Burin Peninsula transmission line TL219 and related generation is directly analogous to the GNP transmission and generation and should be specifically assigned to NP or to a new sub-transmission class for NP and the Hydro Rural customer class. According to the IC TL219 was not constructed, nor is it necessary, to interconnect the Paradise River generating station to the Island Interconnected System; it services primarily NP customers. The IC submitted that TL212 is the only line that physically serves NLH's rural customers and that TL219 and TL212 are not physically interconnected by NLH assets. The IC also suggested that the relative load allocation between the two customer classes, at 99.5% for NP and 0.5% for Hydro Rural should be considered. Assignment of TL219 to common plant increases the costs to the IC by $230,000. (IC-228; Written Argument, IC, pgs. 25-27; 44)

A COS methodology requires that the specific costs associated with the provision of electrical service be assigned to customers in a fair and equitable manner. Cost assignment is not an exact methodology and often requires the exercise of judgment. In the case of the Burin Peninsula transmission assets the Board recognizes the impact on the IC of the application of the guideline proposed by NLH, which states that transmission assets of substantial benefit to more than one customer should be assigned common. The Board agrees with the IC that the relative load allocation between NP and Hydro Rural (99.5% versus 0.5%) should be considered when allocating costs for these assets. In the Board's view the fact that NLH serves a very small group of customers on the Burin Peninsula is not, in and of itself, sufficient justification to assign these assets as common and thereby shifting more costs to the IC.

NLH has also used as justification in assigning the Burin Peninsula transmission assets as common plant the fact that these assets connect significant generation to the interconnected system. NLH argued that the GNP and Port aux Basques generation was not significant enough to warrant assignment of the associated transmission line to common. The Board accepts that the generation plant on the Burin Peninsula is of larger capacity than that on the GNP and in the Port aux Basques area. While, the Board has no specific guideline against which to measure how much generation would be considered significant enough to justify assignment of costs to common, the Board is not satisfied that the amount of generation capacity is sufficient, in and of itself, to justify assignment of the Burin Peninsula transmission assets to common. The Board also notes that this generation is owned by NP and that the benefit of the generation to the system is handled through the generation credit to NP in the COS.

The Board is persuaded by the IC's argument that the Burin Peninsula transmission assets should be split for the purposes of assigning costs in the COS study. Assignment of some or all of these assets to NP would be consistent with the Board's determination for the GNP and Doyles-Port aux Basques transmission assets and is, in the Board's view, a more equitable allocation of those costs. Based on the evidence it appears that TL212 does provide benefit to all interconnected customers since it connects the Paradise River Generation Station to the grid. In the Board's view TL219 can be considered to be analogous to the Doyles-Port aux Basques transmission assets and that it would be fair and consistent to treat it similarly in the COS study. Therefore, the Board accepts the recommendation of the IC that TL219 should be specifically assigned to NP.

The Board does not accept NLH's proposal to assign all costs associated with the Burin Peninsula transmission assets as common. The Board will direct NLH to separate costs for TL219 and TL212. Costs associated with TL219 will be specifically assigned to NP and costs associated with TL212 will be assigned common.

3. Treatment of NP Generation

NP owns and maintains both thermal and hydraulic generation on the Island Interconnected System. NLH can request NP to run its thermal generation and maximize hydraulic generation when needed to meet system requirements. Compensation for this right to request generation capacity is provided to NP through a generation credit in the COS study. Costs are allocated to NP based on NP's native peak demand less the amount of generation NP has available to NLH on request. The capacity credit for the 2004 COS study is calculated in IC-306 as 125.4 MW, which represents NP's hydraulic and thermal capacity of 145.5 MW less a reserve of 16%.

In its Application NLH did not propose any change in the treatment of NP's generation as a credit in the COS study. The issue of proper recognition of NP's generation was raised by NLH's COS expert in relation to the design of a demand-energy rate. (Pre-filed Evidence, R. D.

Greneman, pg. 17) This issue is considered separately in Part II - Section IX of this Decision and Order.

The IC took issue with NLH's treatment of NP's generation as a credit in the COS. The IC's COS experts supported the recognition of NP's hydraulic generation in meeting system requirements but suggested the credit should only reflect the peak capacity NP provides to the system based on economic dispatch to maximize energy output. Since NP's hydraulic generation is expected to be running at 77.5 MW of output the IC suggested that this figure, and not the 81.6 MW of hydraulic capacity reflective of peak output, should be the amount applied to NP's native peak in allocating capacity related costs in the COS study. (Pre-filed Evidence, C. F. Osler and P. Bowman, pg. 39)

On the issue of the credit for NP's thermal generation the IC's COS experts stated that "*…there does not appear to be any credible basis to provide NP with any generation credit to reflect the thermal plant they have in service.*" (Pre-filed Evidence, C. F. Osler and P. Bowman, pg. 39) They stated that, in contrast to hydraulic generation, NP's thermal generation plays no role in meeting the system energy requirements. According to the IC, NP's thermal production facilities are designed to serve emergency needs in specific service areas and incidentally to provide some peaking capacity to the system. These units represent very high cost energy and are among the last generation dispatched in times of system constraint. The IC argued these thermal units provide no benefit to them and that the IC should not have to pay for peaking capacity owned by NP which is installed primarily for local back-up generation support at the end of radial lines such as on the Burin Peninsula and in Port aux Basques. The IC also submitted that the financial result of the treatment by NLH of NP's thermal generation is that the IC and NLH's rural customers pay for 60% of the cost of NP's peaking generation despite making up only 20% of the island peak. The IC argued that, independent of whatever determination the Board may make on the issue of the demand-energy rate for NP, the credit for NP's thermal generation should be removed entirely and the credit for the hydraulic generation should be reduced to reflect the actual anticipated production as opposed to the potential peak output. (Written Argument, IC, pgs. 32-34)

NP argued that its thermal and hydraulic generation play an important role in NLH's generation planning and system operations and that the peak demands used in NLH's COS should be net of the capacity NP provides to the Island Interconnected System. It was NP's position, supported by its expert, that the Board should approve the continuation of the generation credit to NP consistent with the Board's determination in Order No. P. U. 7(2002-2003). (Brief of Argument, NP, pg. D-15)

EES Consulting dealt with the issue of the treatment of NP's generation in the context of its review of the demand-energy rate for NP. EES Consulting identified a number of options regarding the treatment of NP's generation, including unbundling the NP rate into generation and transmission components and a centralized dispatch system for all system generation. A generation tariff for NP generation payable by NLH was recommended which would eliminate the need for a generation credit. This option would, according to EES Consulting, ensure that financial transactions correspond with the operational flow of energy, thus making it more transparent and robust to changes in cost and load. If this option was not adopted EES

Consulting recommended that NLH be directed to unbundle its COS study such that generation costs are allocated using load data net of the generation credit and transmission costs are allocated using the load data gross of the generation credit. (Pre-filed Evidence, EES Consulting, Sept. 19, 2003, pgs. 33-35)

The CA agreed with the views put forward by the IC and EES Consulting. Since some of the NP generation facilities serve more than one function, including both generation capacity for the entire system and distribution capacity for localized areas, the costs of the generation should be split between those two functions. The CA submitted that the Board continue with the current treatment of NP thermal generation in the COS study but recommended that NLH be directed to commission an independent study of the treatment of NP generation. The study should assess the value of NP generation to the system, and make recommendations on how the generation should be accounted for, both operationally and financially, in the COS study and rate design. (Final Submission, CA, pgs. 31-32)

The Board has considered the issue of the appropriate treatment of NP's generation in previous decisions. In its 1993 report arising from the generic COS hearing the Board recommended that NP's mobile gas turbine at Port aux Basques be included as part of NP's gross generation before adjusting for reserve capacity. The primary consideration for the Board at that time was whether or not NP's mobile gas turbine has an availability commensurate with units NLH counts as firm capability and, as such, could be included by NLH as part of system capacity. (1993 Generic COS Report, pg. 51) In NLH's 2001 general rate hearing the IC argued that NLH's treatment of NP's generation and the IC's non-firm load was inconsistent and unfair. In Order No. P. U. 7(2002-2003) the Board accepted NLH's treatment of the generation credit for NP.

None of the parties suggested that NP should not be given credit for its hydraulic generation. The IC argued that the credit for the hydraulic production should be reduced from 81.6 MW to 77.5 MW to reflect the actual anticipated production as opposed to the potential peak output. The Board notes that the methodology used by NLH in IC-306 to calculate NP's generation credit is the same as used by NLH in its 2001 general rate hearing and approved by the Board. The Board does not agree that the credit for hydraulic production should be reduced as proposed by the IC. NP's native load coincident peak is calculated by adding NP's coincident peak as forecast by NLH and NP's forecast hydraulic generation. The hydraulic capacity credit of 81.6 MW is calculated using the available hydraulic capacity of 94.6 MW less 16% reserve capacity. The forecast hydraulic output of 77.5 MW is a forecast production number for the purposes of calculating NP's native load for the 2004 test year, and depends on forecast hydraulic and operating conditions. The calculation of the net capacity credit is, in the Board's opinion, a proper recognition of the hydraulic capacity available to NLH for the purposes of applying a generation credit to NP's coincident peak in the COS study.

The Board is not persuaded that NP's thermal generation should be treated any differently than NP's hydraulic generation for the purposes of calculating the capacity credit. Both NP's thermal and hydraulic generation are available to NLH for generation planning and system operations and, as such, NP should be given a credit for this capacity. While NP's thermal generation may not be used to the same extent or for the same purpose as NP's hydraulic generation, primarily because of its higher cost, the thermal generation still comprises available capacity for NLH in terms of the island system capability. Therefore, the Board agrees that NLH should provide a credit to NP for its thermal generation.

The Board notes however the concern raised by the IC regarding the apparent inconsistencies that arise when the credit is applied in the COS study and the resulting costs allocated to the IC. Table 6.4 on page 30 of the IC's COS expert's pre-filed evidence outlines the costs to the IC of various peaking capacities from the COS study. This Table shows costs to the IC of \$16.23/kW for 45.5 MW of NP's generation, versus \$2.19/kW for 128 MW from NLH's gas turbines. The IC raised this issue during cross-examination of Mr. Greneman:

> Q. (Mr. Hutchings): Okay. And again, going back to the table, the top entry there refers to Hydro's gas turbines and the provision of 129 kilowatts of peaking capacity – 128,000 kilowatts of peaking capacity at a cost to the Industrial Customers of \$280,613. You agree that that's the way that the cost of service assigns those costs?
> A. (Mr. Greneman): That's my understanding. I'll agree to that.
> Q. Okay. Now sir, if Hydro's gas turbines, which I would suggest to you serve essentially the same function on the system as Newfoundland Power's gas turbines, are charged to the Industrial Customers for the benefit of 128,000 kilowatts for \$280,000, what is fair about the Industrial Customers paying \$738,000 for 45,500 kilowatts?
> A. I noted in Mr. Osler's and Mr. Bowman's testimony yesterday that the same point was being made and perhaps it needs some attention or some look at.
> Q. Would you agree with me that there is an unfairness present on the face of this?
> A. I'm not going to use the word "unfairness" but there seems to be some sort of inequality.
> Q. Would you agree that this is not a result that would be consistent with the proper principles of cost allocation to be applied in the public utility setting?
> A. At this moment, I wouldn't go so far as to say that. I would simply say it merits review.
> Q. Okay. And are you telling us that you have not reviewed the issue?
> A. I note that there might be an anomaly but I'm not 100 percent sure what the remedy is.
> (Transcript, Nov. 14, 2003, pgs. 217/4-2; 218/l1-14)

Mr. D. Bowman, the CA's COS expert witness stated: *"I do see some discrepancies in the whole issue of the generation credit. I certainly am sympathetic to the evidence put forward by the Industrial Customers."* (Transcript, Nov. 17, 2003, pg. 109/16-19) Mr. Brockman agreed that the COS result is an anomaly but suggested that it would not be proper to deal with only this aspect of the COS methodology in isolation. (Transcript, Nov. 18, 2003, pg. 106/14-21)

Although the treatment of NP's thermal generation credit seems to result in an anomaly when the cost per kW charged to the IC for this credit is compared to that charged for NLH's gas turbines, which essentially serve the same purpose, the answer appears to be found in Table 6.4 on page 30 of Mr. Osler and Mr. Bowman's pre-filed evidence. The Board understands from this Table that NP makes up 80.6% of the system peak and hence bears 80.6% of the cost. The IC bear 12.64% of the cost, and Rural Customers 6.76%. Any credit, therefore, would be proportionally allocated in the same manner. Since there are only three customers sharing these costs (NP, IC and Rural Customers), any credit to NP for the use of its plant will be a cost to the other customers. Under the current COS methodology and recognizing the contribution of NP's thermal plant to the Interconnected system, the Board finds that the allocation of the NP thermal generation credit is appropriately determined.

In light of the concerns and issues raised in this hearing the Board does agree, however, with the CA's recommendation that an independent study of the treatment of NP's generation is warranted. The Board will direct that NLH undertake such a review, as proposed by the CA, to be filed with its next general rate application.

The Board accepts NLH's treatment of NP's hydraulic and thermal generation in the COS study.

The Board will direct NLH to commission an independent study, to be filed with its next general rate application, of the treatment of NP's generation. This study should assess the value of NP's generation to the system and make recommendations on how the generation should be accounted for, both operationally and financially, in the COS study and rate design. NLH will be permitted to recover its reasonable costs associated with this study and may accumulate these costs in a deferral account to be dealt with at its next general rate application.

4. NP Demand Forecasts

The IC raised the issue of the accuracy of NP's forecasts of peak demand and energy and the impact of these forecasts on the costs that are allocated to the IC in the COS study. The forecast COS study for 2002 was approved as a result of NLH's 2001 general rate hearing. The IC contended that NP's actual payments to NLH were approximately $5,000,000 lower than the amount that should have been allocated by rates (including the rural deficit), while the IC paid more than $5,000,000 in excess of its measured costs in 2002 (including RSP adjustments). (Pre-filed Evidence, C. F. Osler and P. Bowman, pg. 39/12-19) According to the IC the variance in NP's actual load factor compared to its 2002 forecast is one of the contributing factors for this difference.

The IC's experts recommended that NP's load forecasts need to be reviewed to assess the extent to which NP's peak demands as forecast result in a reasonable allocation of demand costs. (Pre-filed Evidence, C. F. Osler and P. Bowman, pg. 3/30-31) In final argument (pg. 31) the IC submitted that NP's peak demand forecast for COS allocations be increased by 16.3 MW to make it consistent with actual five year average load factors.

NP argued there is no pattern in the annual variances between NP's forecast and actual demand. NP acknowledged the variation identified by the IC for the 2002 test year. As a result of this variance NP and NLH agreed on a revised forecast methodology to reflect a longer historic period to estimate an expected peak. NP now bases its demand forecast on a 15-year average load factor. NP submitted that its demand forecast for the 2004 test year is reasonable. (Brief of Argument, NP, pgs. D-15 to D-17)

NLH confirmed its acceptance of this methodology during cross-examination:

> A. (Mr. Haynes)…they have made some changes to that methodology in the last little while which we fully agree with and the actual load factor for Newfoundland Power's native peak is basically, I understand now, a 15-year average which is 49 ½ percent and there was some discussion on that last time through. And so, Newfoundland and Labrador Hydro reviewed that and we fully agreed with using the 15, the long term load

> factor because it looks after some of these, you know, some of the other—the cold winters and the mild winters, it's an average load factor and I guess at one point in time, they were using a shorter period and now it's a longer period which we fully endorse and agree with.
>
> (Transcript, Nov 12, 2003, pgs. 190/25; 191/1-15)

The Board agrees with the IC's recommendation that the Board review the test year load forecasts in determining revenue requirement. This is necessary to ensure that the allocation of costs from the COS study is fair and that customers only pay those costs attributable to their demands on the system. The forecasts for the 2002 test year were reviewed and accepted by the Board in Order No. P. U. 7(2002-2003). The very nature of forecasts is such that the results will most likely be different than expected, because of variable conditions such as end-use customer loads and weather conditions. While the Board has no basis to dispute the IC's contention that the actual 2002 COS results are significantly different than forecast the Board sees no merit in addressing this specific issue further. Rates are based on forecast costs (as required by the *EPCA*) and the Board does not engage in retroactive rate setting or adjustments.

The Board reviews the forecasts used in determining the 2004 test year revenue requirement to ensure that the forecasts are based on reasonable expectations and take into account any anticipated changes in circumstances. The Board has not been presented with any evidence that NP's demand and energy forecasts are inaccurate or biased, either from a historical basis or for the 2004 test year forecast. A review of IC-155, which provides forecast and actual system sales and load for NLH's customers for the period 1994-2001, shows variations in both demand and energy forecasts for NP and the IC. In the Board's opinion NLH and NP have acted appropriately in addressing the variance in the 2002 demand by using a longer historic period for forecasting the expected peak and hence determining the load factor. The Board will make no adjustment to NP's demand forecast for the 2004 test year.

The Board accepts the demand and energy forecasts for NP as proposed by NLH for use in the 2004 test year COS study.

VII. LABRADOR INTERCONNECTED SYSTEM

1. Introduction

In Order No. P. U. 7(2002-2003) the Board approved NLH's proposal to simplify rate classes and structures for the Labrador Interconnected System and also to implement uniform interconnected rates for customers in Happy Valley-Goose Bay, Labrador City and Wabush. As a result the 24 different rate classes were consolidated into six (6) rate classes which aligned with those in place on the Island Interconnected System. The Board also approved NLH's proposal to equalize rates for customers in Labrador City and Wabush. The Board ordered NLH to file a five year plan for implementation of a uniform rate structure for the Labrador Interconnected System as part of its next rate application and acknowledged NLH's efforts to keep the increases to a level that would not cause rate shock as it moved toward uniform rates.

NLH filed with its Application a proposal to implement uniform rates in the Labrador Interconnected System as directed by the Board in Order No. P. U. 7(2002-2003).

Following the filing of this Application Government directed the Board to hold a hearing into the appropriate rate calculation methodology for the Labrador Interconnected System upon receipt of a complaint of discriminatory rates. The Towns of Labrador City and Wabush subsequently filed a complaint. (Appendix E) The Board heard evidence and argument relating to this complaint as part of this proceeding in Labrador City, Happy Valley-Goose Bay and in St. John's.

Before examining the positions of the parties respecting NLH's rate proposals for customers on the Labrador Interconnected System it is helpful to summarize the development of the electrical system in the region and to review the history of the Board's recommendations and decisions with respect to rates and Cost of Service (COS) methodology for the Labrador Interconnected System.

2. Development of the Electrical System in Labrador West and Happy Valley-Goose Bay

The development of the electrical system in the Happy Valley-Goose Bay area and Labrador West was influenced by the history and growth of the townsites of Labrador City and Wabush. NLH provided a summary of the development of the respective systems in opening comments during the hearing in Labrador City and Happy Valley-Goose Bay. (Transcript, Nov. 26, 2003, pgs. 18-25; Nov. 27, 2003, pgs. 14-18)

<u>Labrador City</u>

From 1965 to 1991 the electrical distribution system for the Town of Labrador City and adjacent sites was provided by the Iron Ore Company of Canada (IOCC) under the terms of an agreement dated December 14, 1965 between IOCC and the Board. This agreement included a schedule of rates and a schedule of regulations and conditions of service. IOCC and NLH entered into an agreement dated December 3, 1991 whereby, subject to the approval of the Board, IOCC agreed to transfer to NLH as of May 1, 1992 the electrical distribution system serving the Labrador City service area. NLH agreed to operate, maintain and upgrade the system to standards provided for in the agreement. The Board approved the transfer in Order No. P. U. 4(1992). The rates, regulations and conditions of service as provided by IOCC under the previous agreement were continued by NLH. These rates remained at the 1992 level until 2002 when new rates were set for all of NLH's customers as a result of NLH's 2001 general rate application.

Wabush

Wabush Mines initially provided electrical service to the residents and businesses in the Town of Wabush under the terms of an agreement between Wabush Mines and the Board dated December 1965. This agreement exempted Wabush Mines as a public utility but obligated the company to provide safe service. In 1982 the Town of Wabush filed a complaint regarding the provision of adequate electrical service with the Board. Following an investigation the Board wrote to Wabush Mines and ordered it to upgrade the system to a safe and reliable standard. Following discussions between the Provincial Government, Wabush Mines and NLH, in 1985 it was agreed that NLH would assume responsibility for the electrical distribution system in the town. Wabush Mines agreed to pay to the Power Distribution District (PDD)[1] a sum of money equivalent to the lesser of $3,000,000 or the amount of funds required to repair, restore and upgrade the distribution system. This money would be paid in annual instalments of $500,000. The PDD agreed to take responsibility for the restoration of the system.

The PDD filed rate referrals for the Wabush Service Area with the Board in 1985 (to confirm interim rates for 1985 and to set rates for 1986, 1987 and 1988) and in 1987 (for rates for 1988, 1989 and 1990). The Board's findings and recommendations following the 1987 referral resulted in appeals to the Courts by both the Towns of Wabush and the PDD. The LGIC approved the rates for 1988 but deferred consideration of recommended rates for 1989 and 1990 pending disposition of the appeals. The Courts remitted the matter back to the Board following which rates for 1989 were recommended and approved. Rates in Wabush remained at the 1989 level until 2002 when new rates were set for all of NLH's customers as a result of NLH's 2001 general rate application.

Happy Valley-Goose Bay

Prior to 1976 electricity was supplied to the Goose Bay airport area by the Federal Department of Public Works. In December 1976 this distribution responsibility was transferred to the PDD. The issue of the rates to be charged by the PDD in the Happy Valley-Goose Bay area was considered at a 1978 public hearing on the rates to be charged by the PDD. In its 1979 report to Government the Board recommended, among other things, that the specific rates for Labrador Interconnected customers should be those charged by NP on the Island Interconnected

[1] The Power Distribution District of Newfoundland and Labrador (PDD) was established 1971 to manage electrification to rural areas of the Province. NLH assumed responsibility for the PDD assets and operations in 1989 and acquired the direct responsibility to provide service to those customers.

System, including the application of the fuel adjustment charge. The Board also recommended this rate be charged until such time as the sales volume had increased to provide revenue sufficient to equal the cost of service. In 1981 the rates in Happy Valley-Goose Bay area were set by Board Order to be the same as the rates charged by NP on the Island Interconnected System, excluding the fuel adjustment charge. Rates remained at the 1981 level until 2002 when new rates were set for all of NLH's customers following NLH's 2001 general rate hearing.

Present System

Approximately 8,900 customers are served on the Labrador Interconnected System. Virtually all power and energy made available by NLH for the Labrador Interconnected System is purchased from Churchill Falls (Labrador) Corporation Limited [CF(L)Co.] NLH has a total of 300 MW and 2,362 GWh available annually, with any surplus to NLH's needs currently sold to Hydro-Quebec. (Pre-filed Evidence, J. R. Haynes, pg. 7)

NLH owns 269 km of 138 kV transmission line and the associated terminal stations interconnecting Happy Valley-Goose Bay to Churchill Falls. NLH also owns 44 km of 46 kV sub-transmission lines in Labrador West, of which 25 km provides an emergency interconnection between Labrador West and Fermont, Quebec. Customers in Labrador West are serviced under an arrangement with TwinCo, the owner of the transmission facilities, for wheeling electrical energy from Churchill Falls.

NLH also owns and maintains 336 km of low voltage distribution lines and 9 substations in Wabush, Labrador City, Happy Valley-Goose Bay, Northwest River, Sheshatshiu, Mud Lake and limited distribution facilities in Churchill Falls. There is also standby generation consisting of a gas turbine and a diesel plant in Happy Valley-Goose Bay, with a total capacity of 38.3 MW, used primarily for back-up and limited peaking capacity. NLH's Energy Control Centre remotely operates the gas turbine.

3. History of Cost of Service for the Labrador Interconnected System

In its 1979 report the Board recommended that, in order to deal with the question of rates, the PDD be separated into three separate areas: Diesel, Island Interconnect and Labrador Interconnect. The Board also recommended that "*the Labrador Interconnect area should be considered as a distinct region with its own cost of service and rates both at present and when the Labrador and Island portion of the province are interconnected because the area is completely separate as is its source of supply of power.*"

In 1991 the *EPCA, R.S.N., 1990* was amended to remove the exemption given to Labrador Interconnected customers with respect to their share of the funding of the rural deficit. In late 1991 NLH referred an application to the Board for rate increases and classification changes for the Labrador Interconnected customers. Subsequent to the filing, the referral was amended to delete the increases requested for the Labrador Interconnected System. Since NLH did not file a rate referral or application on Labrador Interconnected rates until 2001, these customers had not contributed to the funding of the rural deficit (as required by the *EPCA*) during the period 1991 to 2001.

The issue of the COS methodology to be used by NLH in setting rates for all customers was reviewed by the Board at a generic COS hearing beginning in 1992. At this hearing the question of the appropriate methodology to be used for the Labrador Interconnected System was considered. In its 1993 report following from that hearing the Board stated at pg. 10:

> *"The Board agrees with Hydro's view that questions of cost of service methodology should be settled as result of the present hearing. The Towns have not submitted any evidence or arguments to show that costs in Labrador Interconnected System are not appropriately allocated by means of a single cost of service study, or that the rate class structure adopted by Hydro for that system is inappropriate. The Board is not aware of any instance where more than one embedded cost of service study has been deemed necessary for a single interconnected system and moreover considers that all customers served within the Labrador Interconnected System share common costs of generation, transmission and a variety of overheads. It therefore concludes that a single cost of service study is appropriate for that system."*

The Board recommended the structure adopted by NLH for COS purposes comprising one study for the Island Interconnected System, one for the Labrador Interconnected System and one for all Isolated Rural Systems be approved. The Board also recommended that the rural deficit be allocated to consumers of electricity, with the exception of rural customers, on the basis of units of consumption of demand, energy and number of customers. The Board's report, dated February 1993, was submitted to Government and subsequently approved in 1998.

The issue of the rates to be charged by NLH to its Rural customers was again considered by the Board in 1995 as part of the rural rate inquiry. In its 1996 report the Board recommended that there be a separate COS study for the Labrador Interconnected System, including Labrador West and the Happy Valley-Goose Bay area.

During NLH's 2001 general rate hearing the issue of the appropriate methodology for setting rates was again raised by the Towns of Labrador City and Wabush. In Order No. P. U. 7(2002-2003) the Board found that the Labrador Interconnected System should be treated as one system for the purposes of setting rates.

4. Application Proposals for the Labrador Interconnected System

In this Application NLH is proposing a five year plan to implement uniform rates for Labrador Interconnected customers using the following cost recovery targets:

Domestic	95%
General Service	105%-115%
Street Lighting	100%

NLH's proposal also incorporates the Board's direction in Order No. P. U. 7(2002-2003) to phase in the application of the revenue credit for secondary energy sales to CFB Goose Bay to the rural deficit. This revenue credit was previously applied to the COS for the Labrador Interconnected System. The Mediation Report recommended:

> *"dd. Hydro will adjust the Rural Rate Alteration Component of the RSP based on its projection of the 5-year phase-in of Labrador rates and the revenue credit available from secondary energy sales to CFB Goose Bay."*

NLH's proposal for the phase-in of rates on the Labrador Interconnected System is set out below:

Target Rate Recoveries Labrador Interconnected System							
	Current Rate	**Target Rate**	**Target Rate Level[1]**				
Customer	**Recovery**	**Recovery**	**2004**	**2005**	**2006**	**2007**	**2008**
Happy Valley/Goose Bay							
Domestic	100%	100%					
General Service 2.1	66%	100%	76%	86%	100%		
General Service 2.2	120%	100%	120%	113%	100%		
General Service 2.3	134%	100%	134%	121%	100%		
General Service 2.4	133%	100%	133%	121%	100%		
Street and Area Lighting	95%	100%	100%	100%			
Labrador West							
Domestic	41%	100%	53%	62%	72%	85%	100%
General Service 2.1	51%	100%	66%	73%	80%	89%	100%
General Service 2.2	74%	100%	89%	100%			
General Service 2.3	77%	100%	92%	100%			
General Service 2.4	82%	100%	98%	100%			
Street and Area Lighting	38%	100%	60%	70%	80%	90%	100%

[1] The target rate level is based on each rate class' appropriate rate being 100%. The appropriate rate is calculated based on the cost recovery targets plus the rate class' portion of the rural deficit.

(Revised Evidence, S. D. Banfield, Table 2, Oct. 31, 2003, pg. 12)

The proposed phase-in of uniform rates outlined above limits average rate increases for each class to a maximum of 20% in years 2005 to 2008. However, the revenue requirement necessitates a 28% increase in 2004 for Labrador West. (Revised Evidence, S. D. Banfield, Oct. 31, 2003, pg. 12/12-15) NLH's existing and proposed rates for domestic and general service customers in Happy Valley-Goose Bay and Labrador West are outlined on the following page.

Comparison of Proposed Rates Schedules 2004-2008 Labrador Interconnected System								
Happy Valley-Goose Bay								
	Rate Class	**2003[1]**	**2004[2] Aug 12**	**2004[3]**	**2005**	**2006**	**2007**	**2008**
Basic Charge $/mo	1.1	7.00	7.00	7.00	7.00	7.00	7.00	8.00
kWh Charge ¢/kWh		3.25	3.25	3.25	3.25	3.25	3.25	3.274
Basic Charge $/mo	2.1	9.10	9.10	9.10	9.10	10.10		
kWh Charge ¢/kWh		3.16	4.032	4.290	4.742	5.086		
Demand Charge $/kW/mo	2.2	2.00	2.00	2.00	2.00	2.00		
kWh Charge ¢/kWh		3.00	3.00	3.00	2.787	2.398		
Demand Charge $/kVa/mo	2.3	1.85	1.85	1.85	1.85	1.85		
kWh Charge ¢/kWh		2.95	2.95	2.95	2.601	2.116		
Demand Charge $/kVa/mo	2.4	1.70	1.70	1.70	1.70	1.70		
kWh Charge ¢/kWh		2.50	2.50	2.50	2.260	1.808		
Demand Charge $/kW/mo	3.1*	2.00	2.00	2.00				
kWh Charge ¢/kWh		2.50	2.50	2.50				
* Effective January 2005, Rate 3.1 will be eliminated and customers will become part of Rate 2.2 and 2.3								

Labrador West								
	Rate Class	**2003[1]**	**2004[2] Aug 12**	**2004[3]**	**2005**	**2006**	**2007**	**2008**
Basic Charge $/mo	1.1	3.75	4.45	4.85	5.50	6.25	7.15	8.00
kWh Charge ¢/kWh		1.35	1.601	1.723	2.039	2.371	2.804	3.274
Basic Charge $/mo	2.1	9.10	9.10	9.10	9.10	9.10	9.55	10.10
kWh Charge ¢/kWh		2.20	2.832	3.072	3.520	3.945	4.450	5.086
Demand Charge $/kW/mo	2.2	2.00	2.00	2.00	2.00			
kWh Charge ¢/kWh		1.60	2.056	2.241	2.398			
Demand Charge $/kVa/mo	2.3	1.85	1.85	1.85	1.85			
kWh Charge ¢/kWh		1.50	1.882	2.069	2.116			
Demand Charge $/kVa/mo	2.4	1.70	1.70	1.70	1.70			
kWh Charge ¢/kWh		1.70	1.731	1.779	1.808			

Note: Blank cells indicate that there are no further change in rates.
[1] Current rates.
[2] Proposed 2004 rates that had been included in the Aug. 12, 2003 filing with the Board.
(Revised Evidence, S. D. Banfield, Schedule V, Aug. 12, 2003, pg. 1)
[3] Revised Evidence, S. D. Banfield, Schedule V, Oct. 31, 2003, pg. 1.

NLH requested that the Board approve that the rate schedules filed for customers on the Labrador Interconnected System automatically come into effect January 1 of each year with the provision that adjustments could be made should a general rate application be filed in the intervening period.

5. Complaint of the Towns of Labrador City and Wabush

The Towns of Labrador City and Wabush argued that NLH's proposed rates for the Labrador Interconnected System discriminate against electrical consumers in Labrador West since NLH's proposals fail to align rates with COS and fail to recover costs from the customers that cause them. (Brief of Argument, Towns of Labrador City and Wabush, pg. 34; para. 98) The Towns submitted that NLH's proposal for uniform rates is based on the fallacy that the two separate systems serving Labrador East and Labrador West should be treated as a single interconnected system. According to the Towns, these systems are not interconnected and have always existed distinctively with no operational relationship between them. The Towns submitted that the transmission line from Churchill Falls to Happy Valley-Goose Bay and the back up generation capacity in Happy Valley-Goose Bay is for service to Labrador East and has no relevance to Labrador West. Customers in Labrador West therefore should not have to subsidize the higher costs associated with electrical service to Labrador East.

Evidence of Mr. Mark Drazen, the expert witness for the Towns of Labrador City and Wabush, quantified the difference in costs for providing electrical service to Labrador West and Labrador East. (Revised Evidence, M. Drazen, Oct. 3, 2003, pg. 2) Mr. Drazen stated that, although both areas receive power from Churchill Falls, the nature and costs of the other facilities serving the two communities are different. According to Mr. Drazen there are cost differences in all three major components of cost (generation, transmission and distribution) resulting from differences in the type of facilities, the ownership of those facilities, and the costs incurred by NLH. Mr. Drazen also stated that the fact that the transmission lines to Labrador West and Labrador East are connected to a common generating source does not mean it is appropriate to allocate the costs as if they were a common system. In Mr. Drazen's opinion NLH's proposal to equalize the costs of the two areas amounts to a policy decision to ignore the material cost differences between the two. As NLH already produces separate COS studies for five different sub-systems based on the different facilities and cost of service among the five areas, Mr. Drazen submitted that there is no inherent policy that requires the rates in Labrador East and Labrador West to be equalized.

The Mayor of the Town of Labrador City, Mr. Graham Letto, and the Mayor of Wabush, Mr. Jim Farrell each made a presentation to the Board in Labrador City. Both Mr. Letto and Mr. Farrell reiterated the positions of the Towns that NLH's proposal to adopt a system of uniform rates for customers in Labrador West and Labrador East amounts to discrimination against consumers in Labrador West. Mr. Letto stated:

> (Mayor Letto) Given the different characteristics of the systems of Labrador West and that in Happy Valley-Goose Bay, and also given that the contributions to cost made by the mining companies in this area, the cost of distributing electrical power to consumers in Labrador West is lower than that required to distribute power to consumers in Happy Valley-Goose Bay. By merging the two systems and posing a system of uniform rates on a so called, Labrador Interconnected grid or a system, Hydro has adopted an arbitrary policy requiring consumers in Labrador West to do nothing more than to subsidize those in Happy Valley-Goose Bay. This arbitrary policy is contrary to principle and amounts to discrimination against consumers in Labrador West.
>
> (Transcript, Nov. 26, 2003, pgs. 158/22-25; 159/1-14)

Both Mayor Letto and Mayor Farrell spoke of the effect of the proposed rate increase on IOCC and Wabush Mines at a time when, due to poor prices and markets, the companies cannot afford any additional burdens. The issue of the collection of the rural deficit through electrical rates was also raised by both Mayors. While the Towns of Labrador City and Wabush stated they don't object in principle to the subsidization of rural electricity rates, such a subsidy is in effect a social tax. As a tax the Mayors stated it ought to be collected through the legislature rather than imposed on certain electrical consumers in the Province. Mayor Farrell summarized the position of the Town of Wabush by stating:

> (Mayor Farrell) Consumers in Labrador West pay electricity rates based on the cost to service Labrador West, together with contribution to the rural deficit. Labrador West should not be required to subsidize Happy Valley-Goose Bay consumers. Hydro should not be placing Labrador West citizens in a position where Labrador West consumers are forced into a direct conflict with those in Happy Valley-Goose Bay.
> (Transcript, Nov. 26, 2003, pg. 177/2-10)

The position of the Towns of Labrador City and Wabush was summarized in final argument (pgs. 22-23):

> *"In conclusion, NLH's proposed policy to institute a single rate structure throughout the so-called Labrador Interconnected System would ignore material cost differences between Labrador East and Labrador West. There is no general policy of rate equalization on the NLH system. Indeed NLH proposes five sets of rates reflecting cost differences among five different sub-systems: Island Interconnected, Island Isolated, Labrador Isolated, L'Anse au Loup and Labrador Interconnected. Systemization is based on the different facilities and costs of service among those five areas. There is no inherent policy that requires the Labrador Interconnected East and the Labrador Interconnected West rates to be equalized. The reasons put forth by NLH's expert Mr. Greneman and the PUB's expert Ms. Tabone, amount to saying "it's a policy decision" but, with respect, do not provide any basis for that policy.*
>
> *The proposed policy of a single rate in Labrador East and Labrador West would discriminate against customers in Labrador West and is directly contrary to the principle that a utility ought to recover costs from the customers that cause such costs to be incurred."*

During the hearing in Labrador City Mr. Dave Porter, Vice-President of Human Resources for IOCC, and Mr. John McGrath, Director of Human Resources for Wabush Mines, made a joint presentation to the Board. Mr. Porter provided a history of the development of the electrical system in Labrador City and Wabush, including the contributions of both IOCC and Wabush. According to Mr. Porter there should be a significant difference in the COS between Labrador West and Labrador East because IOCC and Wabush Mines paid for the electrical infrastructure in Western Labrador. The need to attract and retain a highly skilled workforce to Labrador West was cited as one of the reasons IOCC originally paid for the town's electrical infrastructure. A common rate for Labrador East and West will dilute the effect in Labrador West of the mining companies past contributions to infrastructure and the present subsidy of wheeling at no cost. The companies support NLH raising electrical rates in Labrador West if required to compensate for an increased cost to service Labrador West but do not support raising Labrador West rates and lowering Labrador East rates in an effort to create a common rate policy. The witnesses argued this would effectively result in the companies paying twice for the infrastructure. The impact of the proposed increase in rates on the companies, its employees and the area was stressed. Mr. Porter stated that the uniform rate policy will result in more than four million dollars in additional costs annually for electrical consumers in Labrador West. The mining companies will ultimately have to bear a substantial portion of these increases in costs.

The Board also heard a number of presentations from representatives of unions, Chambers of Commerce, business persons and private citizens, all of whom spoke about the challenges and high costs associated with living in Labrador West and the impact of the rate increases proposed by NLH on businesses and residents in Labrador West.

Mr. Dennis Peck, Director of Economic Development for the Town of Happy Valley-Goose Bay, made a presentation before the Board in Happy Valley-Goose Bay. The Town supported NLH's proposal for uniform rates in the Labrador Interconnected System, and stated that there has always been a concern that there was a fundamental unfairness to the existing rate structure, even though they receive the same product delivered from essentially the same infrastructure and generated by the same source. Mr. Peck stated:

> (Mr. Peck) It is simply not fair that we continue to be asked to fund the lion's share of the subsidy, pay significantly higher rates, and as a direct result of the higher cost, pay a greater share of the HST tax within the Labrador Interconnected system. The longer this imbalance continues, the longer the injustice is allowed to endure.
>
> (Transcript, Nov. 27, 2003, pgs. 44/25; 45/2-8)

His response to the position of the Towns of Labrador City and Wabush that the electrical system in Labrador East and Labrador West should be considered as separate systems was as follows:

> (Mr. Peck) At the very minimum we feel that Mr. Drazen stretched the concept of a system to the very thinnest of definitions to make his case. We consider the concept of looking at the different sides of a generating facility and to suggest that each side of a power plant, and each division of each side is a different system, is to stretch the definition beyond the point of reality. I note that in the extra evidence that was submitted there was a sketch provided by Newfoundland and Labrador Hydro about the layout at Churchill Falls, and I had difficulty whether you could flip it left or right to see the differences between it. If we were to take this logic to the map of the total system on the Island of Newfoundland, and I've provided a copy, where will implementation of this request actually take us, how fine of a division will result if the rationale is followed to its final conclusion. I suggest that this argument is neither appropriate nor in keeping with the intent of Section 73(1) of the Public Utilities Act which states that "all tolls, rates and charges shall always, under substantially similar circumstances and conditions in respect of service of the same description, be charged equally to all persons and at the same rate, and the Board may by regulation declare what shall constitute substantially similar circumstances and conditions.
>
> (Transcript, Nov. 27, 2003, pgs. 36/11-25; 37/2-18)

Mr. Peck took issue with the position of the Towns of Labrador City and Wabush regarding the value to Labrador West of the back-up generation in Happy Valley-Goose Bay. Mr. Peck also commented with respect to the transmission of power at no cost over the TwinCo line, that *"there is no such thing as a free ride nor a service provided at no cost"* and that *"arguments suggesting differences within the Labrador Interconnected System may in the coming years come back to haunt those who raise it."* (Transcript, Nov. 27, 2003, pgs. 37/19-25; 38/1-25)

NLH filed supplementary evidence specifically relating to the Labrador Interconnected System outlining the impacts of the proposed rate implementation plan on customers. NLH's COS expert Mr. Greneman supported the development of rates for the Happy Valley-Goose Bay area and Labrador West based on a single Labrador Interconnected System. Mr. Greneman submitted that costing and pricing the Labrador Interconnected System as a single combined system is consistent with existing practices and policies and strikes a fair and reasonable balance among a number of relevant factors. Mr. Greneman stated that, while costs are a factor, there are other equally relevant factors that should be considered. These include price signals, value of service, opportunity cost and public policy. Mr. Greneman outlined the basic goal of COS is to determine the relative cost differences between customer classes and it is important to maintain a degree of consistency between the same customer classes within regions. This is evidenced in the combining of isolated diesel rates for costing and rate purposes with pricing in part reflective of NP's rates and, as well, by the fact that NLH's Island Interconnected customers are charged NP's rates. According to Mr. Greneman, having separate domestic and general service rates for Labrador East and Labrador West would potentially result in significant price differences between otherwise similar circumstances. (Supplementary Evidence, R. D. Greneman, Oct. 31, 2003)

In final argument NLH reiterated that, while there may be differences in certain elements of costs such as transmission and distribution between the two areas, this situation is not unlike the isolated diesel areas. All the diesel systems are included within one COS study and treated as one for the purposes of designing rates. Furthermore, this is not unlike what occurs between different communities served on the Island Interconnected System. NLH argued that cost differences alone are not sufficient to justify separation of systems for rate setting purposes. NLH submitted there is sufficient evidence before the Board to support the Labrador Interconnected System being treated as one system for the purposes of setting rates. NLH argued the Board should approve NLH's proposed rate design and implementation plan for Labrador Interconnected customers for the period 2004-2008. (Final Argument, NLH, pgs. 75/17-29; 76/1-16)

EES Consulting submitted that the communities in Labrador receiving supply from Churchill Falls constitute an interconnected system and should not be separated into multiple systems for COS analyses. According to EES Consulting the Labrador system is more like the Island Interconnected System with shared generation facilities and some shared transmission facilities. The fact that actual costs vary by location does not justify different rates. *"Postage stamp"* rates, where a single rate is set for the full interconnected system, are standard practice for distribution utilities to ensure fair, equitable and stable rates. EES Consulting also stated that the original purchase price does not denote the value of a system and should not enter into the COS analysis. EES Consulting recommended that there continue to be a single COS for the Labrador Interconnected System and that rates be the same within the system, regardless of the location of the customer. (Pre-filed Evidence, EES Consulting, Sept. 19, 2003, pgs. 16-17)

In final argument (pg. 44) the CA stated that his mandate is to represent all of the consumers of the Province. In this particular case the CA noted there are competing interests. The CA submitted that the Board should carefully examine all the evidence so that the Board's decision ensures that there is no undue subsidization between ratepayers in Labrador West and Labrador East.

The IC and NP did not take a position or make submissions on this issue.

In making its decision with respect to this issue the Board must be guided in the first instance by its legislative mandate under the *EPCA* and the *Act*. Section 3 of the *EPCA* sets out the power policy of the province, including the requirement in Section 3(a)(i) that rates for the supply of power within the province should be reasonable and not unjustly discriminatory. Section 4 of the *EPCA* requires the Board to implement the power policy declared in Section 3 and to apply tests which are consistent with generally accepted sound public utility practice. The Board has outlined its guiding regulatory principles in Part I - Section IV of this Decision and Order.

Differences in rates will exist due to the nature of rate making and the methodologies associated with using generally accepted sound public utility practice. In the rate making process it is often not practical to develop a multitude of rates to accurately reflect the individual circumstances of different electrical consumers. For example a consumer who lives near a generation source may argue that she/he requires less transmission, and hence should pay lower rates than another consumer who lives further away. Since it would be impractical to design individual rates for each consumer, consumers are usually grouped into rate classes according to the type of service they use (e.g. residential, general service, industrial) with one rate for the entire class, regardless of geography or individual circumstance.

The Towns of Labrador City and Wabush argue that Labrador West and Labrador East should be considered separately for rate setting purposes because of the significant cost differences between the two systems and also because of the historical factors contributing to the development of the Labrador West system. The Board will deal with each of these issues separately.

The Board does not accept the argument of the Towns of Labrador City and Wabush that the historical development of the electrical system in Labrador West is a factor that should be considered when determining whether to have uniform rates in Labrador West and Labrador East. While the evolution of the electrical distribution system in Labrador West certainly plays a role in the nature and costs of the system in place today, the Board is only concerned with setting rates on a prospective basis as required by legislation. The contributions of IOCC and Wabush Mines toward the costs of the existing system in Labrador West were undertaken when the companies owned and operated the systems and were a consideration when NLH negotiated the take over of the systems. Any claim to an expected or ongoing benefit in terms of continued low rates after the asset transfer to NLH, as suggested by the Towns, is not supported by the transfer agreements.

In the Board's view the development of the electrical distribution system in Labrador West is similar to the development of the existing Island Interconnected System, where several smaller systems owned by various operators in different geographic locations were amalgamated over time into a single system with ownership and operating responsibilities resting with a single entity. Indeed this is the nature of the development of many of the existing electrical systems in Canada where technical improvements and economies of scale made this a reasonable and practical course of action.

The Board's conclusions with respect to the issue of uniform rates for the Island Interconnected System in 1968, while not binding, are of interest. Newfoundland and Labrador Power Commission had proposed a group rate structure where customers in different communities on the Island Interconnected System would be subject to one of three rates based on different distribution costs. The company argued before the Board at the time that service of the same description supplied at different costs in different areas is supplied under substantially different circumstances and hence rates should be based on the costs of providing the service. In Order No. 29(1968) the Board did not accept this proposal, finding that *"…the proposed Group Rate Structure is unreasonable and unjustly discriminatory and that for reasons of social justice and practicability the Company shall charge uniform rates throughout its entire service area for each class of service…"*.

The Board accepts that there are cost differences between Labrador West and Labrador East. While not confirming the costs as presented by Mr. Drazen, NLH also acknowledged that there are cost differences. The costs in Labrador East are calculated by Mr. Drazen to be in the range of 1.7-2.5 times higher, depending on which COS treatment is assumed for the standby generation in Happy Valley-Goose Bay. (Revised Evidence, M. Drazen, Oct. 3, 2003, pg. 1)

The Board agrees with the opinion of Mr. Greneman however that the fact that there are cost differences does not in and of itself justify separation of the system for rate setting purposes. A sub-dividing of any other geographic area or region on the Island Interconnected System for example would in all likelihood result in cost differences between the two. However the Board would have to be satisfied that there is a valid reason to identify and segregate the different costs for the provision of service before proceeding to develop separate rates for the different areas.

Section 73(1) of the *Act* states:

> *"All tolls, rates and charges shall always, under substantially similar circumstances and conditions in respect of service of the same description, be charged equally to all persons and at the same rate, and the Board may by regulation declare what shall constitute substantially similar circumstances and conditions."*

When questioned on the applicability of this section, Counsel for the Towns of Labrador City and Wabush stated:

> A. (Mr. Hearn) It's our view that the operative part is *"under substantially similar circumstances and conditions in respect of service of the same description"* and that's why Mr. Drazen does his analysis on costs, which is uncontradicted. We look at the history. We look at the operation. We say that the two separate systems serving Labrador East and Labrador West with different history, different cost base, completely operationally unrelated, that we're into a situation where it's not substantially similar circumstances and conditions in respect of service. It's, in fact, completely dissimilar, and that's the core of our presentation.
> (Transcript, Jan. 16, 2004, pgs. 176/21-25; 177/2-12)

The Board interprets Section 73(1) of the *Act* to mean that all customers of a particular utility under substantially similar circumstances and conditions in respect of service of the same description must be charged the same rate. The Board concludes that Labrador West and Labrador East must be considered to be receiving a service of the same description in that they are served by the same generation. The Board further finds that Labrador West and Labrador East must be considered to be receiving this service under substantially similar circumstances and conditions since they are connected to each other and thereby can together be distinguished from the Isolated Systems in the rest of Labrador. The Board accepts the evidence of EES Consulting that it is standard practice for distribution utilities to charge a single rate for the full interconnected system. This approach has been taken by the Board in the past when communities were added to the Island Interconnected System and customers in these communities were charged the same rate as other customers on the Interconnected System. (IC-65)

The COS studies undertaken by NLH for the purposes of setting rates for its Isolated Rural customers embody the principle that substantially similar circumstances do not mean identical circumstances. Although electrically isolated from each other NLH's 24 isolated diesel systems in the Province, both on the Labrador Coast and on the Island, are grouped together for the purposes of COS and setting rates. This approach recognizes that, while not interconnected and in fact widely dispersed geographically, customers in these systems are charged the same rates for the same service under substantially similar circumstances and conditions in respect of service. A consistent approach would lead to the same conclusion for customers in Labrador West and Labrador East.

The Board finds that the Towns of Labrador City and Wabush have not established that the rates for the Labrador Interconnected system proposed by NLH are discriminatory. The Board does not accept that the historical development of the costs of the Labrador Interconnected System should be determinative. The Board is required to observe Section 73(1) of the *Act*. While it may be argued that the historical development or the costs of a system are factors to be considered in the determination of substantially similar circumstances and conditions, the Board notes that the same could be said in respect of a determination for any of the customers of NLH. Each customer or group of customers of NLH could argue that they cause less costs than another customer or group of customers or that the history of the system providing the service is different. The basic goal of cost of service is to determine the relative cost differences between customer classes. The Board is satisfied that the customers on the Labrador Interconnected System are provided service of the same description under substantially similar circumstances and conditions. The Board concludes a single COS study for customers on the Labrador Interconnected System is appropriate as the basis for determining the rates for all customers on that system. NLH's proposals for uniform rates on the Labrador Interconnected System were developed using a single COS study and are therefore appropriately determined.

The Board finds that NLH's proposals for uniform rates for the Labrador Interconnected System are not unjustly discriminatory and rejects the complaint of the Towns of Labrador City and Wabush.

The Board accepts NLH's proposed five year plan to implement uniform rates for Labrador Interconnected customers as set out in its Application. The Board will direct NLH to file for approval a revised Schedule of Rates for each proposed rate change set out in the five year plan.

The Board accepts the proposal that NLH will adjust the Rural Rate Alteration Component of the RSP based on its projection of the five year phase-in of Labrador rates and the revenue credit available from secondary energy sales to CFB Goose Bay with the provision that it be applied only to the portion of the revenue credit applicable to NP and that the rates of the Labrador Interconnected customers not be negatively affected by this adjustment.

VIII. RURAL SYSTEMS

1. Background

NLH owns and operates 24 isolated diesel generating plants serving approximately 4,500 customers throughout Newfoundland and Labrador. On the Island Interconnected System NLH serves approximately 21,800 rural customers in 180 communities along the south coast, northeast coast and the Great Northern Peninsula. The cost of providing service to these approximately 26,300 rural customers exceeds the revenues collected, resulting in the rural deficit. The rural deficit was funded by Government until 1989 and now is funded by means of a cross-subsidy paid by other ratepayers in the Province, in particular NP customers and Labrador Interconnected customers. By virtue of a statutory amendment to the *EPCA*, the IC have not contributed to the rural deficit since 1999.

Order No. P. U. 7(2002-2003) contained several decisions impacting on the rural deficit. These included directing NLH:

- to maintain rural rates equal to NP rates excepting rates above the *"lifeline block"* (700 kWh) for Isolated Rural customers where rate adjustments were to reflect the average rate increase experienced by NP;
- to eliminate preferential rural rates for Federal and Provincial Government departments/agencies while accepting NLH's proposal to submit a plan at its next general rate application to phase out the remaining preferential rates applied to fish plants, churches, schools, community halls, municipal buildings and recreational facilities;
- to implement in its next general rate application a demand-energy rate for general service customers on Isolated Rural Systems and to eliminate the *"lifeline block"* for this same group of customers.

In advance of the hearing Government directed the Board on various matters affecting preferential rates. Other related issues impacting Rural Systems and the rural deficit were raised during the hearing. These issues include the level of the deficit, the lifeline block, rates for general service customers on isolated systems and a proposal from the Towns of Labrador City and Wabush for an energy tax to recover the costs of the rural deficit. A review of each of these issues is outlined below.

2. Rural Deficit

In Order No. P. U. 7(2002-2003) the Board expressed concern relating to the increasing size of the rural deficit and its impact on ratepayers, both those being subsidized and those doing the subsidization. The Board directed attention toward the prospect of this hearing in ordering NLH:

> *"…to assume responsibility for the development of an evidentiary record involving the rural deficit. This record should involve appropriate consultation with Government and should address the magnitude of the rural subsidy, comparative practices elsewhere, as well as future funding options for the rural deficit. The record should also contain a concise statement of other*

public policy initiatives being implemented by NLH on behalf of Government and their associated costs. The Board will require NLH to file this evidentiary record at its next rate hearing."

In response to this directive NLH held several meetings with senior levels of Government and also prepared a Discussion Paper on the rural deficit, which was forwarded to the Deputy Minister of Mines and Energy on March 25, 2003. A copy of the Discussion Paper was filed as part of the pre-filed evidence of Mr. Wells, President and CEO of NLH.

The Discussion Paper outlined the history and magnitude of the rural deficit, rural rate policies, cost control initiatives on Isolated Systems and comparative practices in other Canadian jurisdictions.

Since 1992 the rural deficit has increased by more than 45% as follows:

Rural Deficit ($millions)			
Year	**Rural Island Interconnected**	**Labrador & Island Isolated**	**Total**
2002	17.6	21.2	38.8
2001	12.1	22.0	34.1
2000	6.8	20.0	26.8
1999	5.8	16.3	22.1
1997	7.5	16.4	23.9
1995	4.4	24.9	29.3
1994	3.2	24.5	27.7
1993	4.0	24.0	28.0
1992	4.2	24.7	28.9

(Pre-filed Evidence, W. E. Wells, Schedule II; Discussion Paper on Hydro Rural Deficit Issues, pg. 2)

The rural deficit is expected to grow by approximately 5% through to 2007 as follows (NP-56):

Rural Deficit ($millions)			
	Island Interconnected	**Isolated**[1]	**Total**
2007	$22	$22	$44
2006	$21	$22	$43
2005	$19	$22	$41
2004[2]	$19	$22	$41
2003	$19	$23	$42

[1] The isolated rural deficit is shown in total as it is not available separately by Island Isolated and Labrador Isolated for all years.
[2] Based on the Aug. 12, 2003 revised filing.

The average subsidy in 2002 was $4,600 for each Isolated Rural customer and $800 for each Island Interconnected Rural customer. On the Isolated Systems, an estimated 26 cents of each dollar spent is recovered from customers, whereas on the Interconnected Rural System 64 cents on the dollar is recovered. According to NLH NP pays approximately 19% more than the cost of service as a cross-subsidy to fund the rural deficit. Customers on the Labrador Interconnected System pay 49% more than the cost of service in paying their share of the rural deficit based on the allocation methodology for the rural deficit in the COS study.

The Discussion Paper (pg. 8) also included a summary of the costs and comparative practices of providing service to Isolated Rural customers in Newfoundland and Labrador and other jurisdictions as follows:

Isolated Rural Customers					
Utility[1]	**Communities Served**	**Number of Customers**	**Operating Deficit $millions**	**Average Cost per kWh**	**Deficit per Customer**
ATCO Electric (Alberta)	10	N/A	Not Tracked	21¢	N/A
BC Hydro	9	9,104	28	13¢[3]	$3,076
Hydro One	20	3,691	18[2]	51¢	$4,877
Hydro Quebec	40	13,797	106	45¢	$7,683
Manitoba Hydro	4	791	3	64¢	$3,793
Newfoundland & Labrador Hydro	25	4,463	16[4]	44¢	$3,585
Northwest Territories Power Corp.	51	15,766	0	17¢[5]	0
Yukon Electrical	10	1,300	Not Tracked	N/A	N/A

1 Numbers based on Manitoba Hydro's May 2001 Survey
2 Subsidy amount $17 million
3 Based on costs as of March 2000. Does not reflect increases in diesel prices
4 Based on 1999 COS Study
5 Figures under review… may include non-diesel sites as well.

The table above was updated for Isolated Rural customers based on 2002 data (excepting ATCO Electric and Yukon Electrical) as follows (NP-58):

Updated Isolated Rural Customers		
Updated Data	**Range Indicated**	**NLH-2002 Forecast Cost of Service**
AVERAGE COST PER KWH	15¢ to 341.7¢	53¢
Operating Deficit	$3,000,000 to $116,000,000	$21,000,000[1]
Deficit Per Customer	$3,700 to $9,600	$4,600

[1]The total rural deficit for Isolated Rural and Island Interconnected Rural customers based on NLH's 2002 forecast Cost of Service is $38,758,134

For the most part, residential customers in the above jurisdictions pay the same rates as customers served from the interconnected grid with higher rates applied above a *"lifeline block"* which is defined differently depending on the jurisdiction.

While cross-subsidization is a common practice and for isolated systems the cost of electricity (53¢ per kWh), the operating deficit ($21,000,000) and the deficit per customer ($4,600) is within the respective ranges indicated for other Canadian jurisdictions, NLH's Discussion Paper makes the point that, with its small population base, there are relatively few customers over which to collect the deficit incurred to service Isolated Systems. NLH observed that, at the 1995 inquiry into rural electric service conducted by the Board, NP pointed out in its evidence that *"Hydro's operating deficit for its diesel areas at 8.8% of revenue from electricity sales is by far the largest. Only Hydro Quebec has an operating deficit that is larger in actual dollars but represents only approximately 1% of revenue from electricity sales. B.C. Hydro's operating deficit is also approximately 1%. Manitoba Hydro and Ontario Hydro operating deficits represent about 0.1% or less of revenue from electrical sales.*"

NLH identified a number of initiatives designed to reduce or control the rural deficit, including interconnection of Isolated Systems to the main grid, training a multi-skilled workforce in remote areas, adopting industry recognized best practices for maintaining Isolated Systems, implementing demand side management programs and seeking alternative technologies for generation supply. Where possible, NLH may also decommission plants based on community relocations. Given these initiatives, NLH noted limited opportunity remains to control direct operating costs while maintaining reliable service. NLH observed general inflationary pressures on costs will exceed any increases in revenues, resulting in a deficit which, all else being equal, will trend upward. (Final Argument, NLH, pg. 72)

Recognizing there is a certain amount of subsidization in any system, the CA took no issue with subsidizing rural ratepayers but expressed a concern in relation to the level of rural subsidy. As referenced earlier, the CA submitted it is unfair to use NLH as a tool to implement expensive social policy while expecting ratepayers to pay a further $19,000,000 for a 9.75% ROE. (Transcript, Jan. 16, 2003, pg. 58/4-18) The CA advocated the creation of a separate department to service the Isolated Systems to assist both in tracking the size of the rural deficit and in directing management attention to minimize the deficit while ensuring adequate levels of service. The CA also recommended a management audit to make the deficit more transparent and help alleviate concerns relating to the huge subsidies now being recovered from customers. (Final Submission, CA, pgs. 33-34)

NP noted the rural deficit increases its revenue requirement by 17% and increases by 10% the rates paid by NP's customers. NP commented that, while Government policy for rural rates and the COS assignment of assets are generally outside of NLH's control, NLH can influence the level of the rural deficit by being as efficient and innovative as possible in its operations. Despite NLH's initiatives, NP cited several capital projects which contributed to an escalating rural deficit. NP submitted that NLH should report annually to the Board on the rural deficit detailing its different components, explaining material variances, and providing a five year forecast. (Brief of Argument, NP, pgs. F-1 to F-5)

The IC argued the Board should recommend to Government arrangements for the transfer to NP of all of the rural customers of NLH on the Island, or at least the Island Interconnected customers. The IC concluded such an arrangement would simplify considerably the plant and cost assignment issues which take up so much time before the Board and put the rural deficit issue in an appropriate context. (Written Argument, IC, pg. 39)

The Towns of Labrador City and Wabush noted that passing the burden of the rural rate subsidy only to retail electrical consumers of NP and the Labrador Interconnected System adds annually a much larger amount to the electrical rate paid by those consumers. The Towns of Labrador City and Wabush argued the imposition of the rural subsidy on some electrical consumers in the Province, while exempting others and exempting production exported, is in effect discriminatory against those customers upon whom the burden of the rural subsidy is imposed. The Towns of Labrador City and Wabush proposed that the rural deficit be collected by the imposition of a tax collected on all electrical production in the Province, whether exported or not. (Brief of Argument, Towns of Labrador City and Wabush, pgs. 27-31)

The rural deficit was an issue before the Board in the 1995 hearing on rural electric service, NLH's 2001 general rate hearing and now this Application. With the rural deficit expected to increase because of the widening gap between rural system revenues and expenditures, the rural deficit will continue to present issues for the Board. As noted in Order No. P. U. 7(2002-2003), depending on the level of subsidy paid by one customer to support equitable rates for another customer, the question arises at what point are electrical rates deemed unreasonable and discriminatory to the subsidizing customers?

As in NLH's 2001 general rate hearing, evidence was again heard during this hearing on alternative options to address the rural deficit, including adjusting the shareholders return on equity as well as implementation by Government of a tax on electricity consumption, including exports. In 2001, the Board concluded taxation is a prerogative of Government and is beyond the control of this Board. With regard to a return on equity adjustment the Board was not able to assess in this Decision and Order how NLH's ROE should be impacted by social policy benefits, such as the recovery of the rural deficit, directed by its shareholder, Government.

The Board concludes implementing fair and non-discriminatory electrical rates under the *EPCA*, for both ratepayers subsidizing the rural deficit and those receiving the subsidy, will remain an on-going issue before the Board. Balancing electricity rates between both sets of ratepayers as well as assessing the impact of the rural deficit on ROE will remain recurring regulatory issues. Bearing these prospects in mind, the Board believes the funding of the rural deficit is not only a regulatory concern but is equally a public policy question that should bear the scrutiny of periodic review by Government.

The Board notes the many suggestions concerning the rural deficit made by intervenors during the hearing. These included an annual reporting of costs, a separate management accountability, transfer of NLH's rural customers to NP, determining the impact on the rural deficit of each capital project and a management audit. NLH agreed an annual report of changes in the rural deficit could be provided if deemed appropriate by the Board. None of the other suggestions were supported by NLH. (Final Argument, NLH, pgs. 71-74)

The creation of a separate department accountable for the rural deficit is a managerial consideration for NLH and not a matter which would normally be considered by the Board. The issue of transfer of customers (and assets) between utilities is a complex issue and raises questions of jurisdiction which should be appropriately addressed prior to the Board making any determination.

The Board agrees NLH should strive to minimize the rural deficit through increased efficiencies while ensuring reliable service. These efficiencies should be achieved through continuing initiatives by NLH aimed at reducing operating costs and a diligent cost-benefit analysis of future capital expenditures. The Board finds a detailed annual reporting will assist in monitoring the rural deficit. The Board suggests NLH submit this report to Government possibly in conjunction with its annual report to its shareholder to enable policy oversight.

Given its finding with respect to the annual reporting on the rural deficit, the Board is of the opinion that a management audit as proposed by the CA is not warranted.

The Board will require NLH to submit, in conjunction with its annual financial report, an annual report on the rural deficit which should include the following:

- **i. the total rural deficit and a breakdown of its components by system (Island Interconnected Rural, Island and Labrador Isolated Rural, and L'Anse au Loup);**
- **ii. a five year forecast of the rural deficit by system;**
- **iii. the number of communities and customers served in each system;**
- **iv. the cost per kWh per system, showing a comparison with cost per kWh for the Island Interconnected System (less rural) and the Labrador Interconnected System;**
- **v. the deficit per customer and the cost recovery ratios for each system; and**
- **vi. a summary of any specific initiatives undertaken to reduce the capital or operating costs in each system.**

3. Lifeline Block for Rural Isolated Domestic Customers

For Rural Isolated Domestic customers a block rate structure exists where rates rise as increasing blocks of electricity are used. The purpose of the first lower priced block or "*lifeline*" block is to provide basic electrical requirements such as lighting, cooking, furnace and water pump operation.

The issue of the lifeline block was considered by the Board as part of NLH's 2001 general rate hearing. As noted in Order No. P. U. 7(2002-2003), the Board heard representations from consumers in coastal Labrador during public participation days that the existing lifeline block of 700 kWh per month was inadequate to meet basic electrical needs. The Board ordered NLH to undertake a review of the lifeline block for domestic customers to assess its adequacy.

In December 2002 NLH filed the report A Review of the Adequacy of the Lifeline Block on Diesel Electric Systems, which was revised at the request of the Board and resubmitted March 12, 2003. (CA-13) In this report NLH suggested that a change in the existing lifeline block has merit owing to the continued rise in the market share for electric hot water heating, seasonal electricity use patterns, and the prominence of diesel system customers located in Labrador. Based on a review of household billing data the report proposed an alternative lifeline which would provide for an increased lifeline block of 1,000 kWh per month in the winter, 700 kWh per month for the summer, and a range between 700-1,000 kWh per month for the remaining seasons. If accepted, the proposal would result in an increase in the rural deficit of approximately $66,000 based on the assumptions outlined in NLH's report. (pgs. 8-9)

In July 2003 the Government issued certain directions to the Board under the authority of Section 5.1 of the *EPCA*, and in particular with reference to the lifeline block for rural domestic customers, directed the Board to:

> *"(iii) continue the allocation of a monthly block of energy for domestic residential customers in diesel-serviced communities, and that such service be priced at Newfoundland Power's interconnected domestic electricity rate. The monthly lifeline block should be satisfactory to provide for the necessary monthly household requirements, excluding space heating. Subsequent monthly energy blocks for these customers to be charged incrementally higher rates as historically structured and determined. Such rates would increase as per any percentage increase to Island interconnected rates for Newfoundland Power customers;"*

In its Application NLH did not propose a change in the lifeline block for domestic customers on Isolated Systems. The parties considered this issue as part of the mediation process. The Mediation Report made the following recommendation:

> *"y. Hydro's current three block Domestic Diesel rate structure should be replaced with a two block structure with the first block equal to the Alternative Lifeline and the second block set so as to maintain revenue neutrality. Parties further suggest that, before its formal acceptance of this proposal, the Board seek comment on this matter from affected customers during public participation days in this proceeding."*

NLH incorporated this recommendation in its evidence of October 31, 2003. (Revised Evidence, S. D. Banfield, Oct. 31, 2003, pg. 8) NLH's proposal reflected the recommendation in the Mediation Report with respect to revenue neutrality, which means that any changes to the lifeline block should not increase the amount of the rural deficit paid by NP and Labrador Interconnected customers. NLH proposed that, upon approval by the Board of the alternative lifeline block, the rate schedule for No. 1.2D Domestic Diesel would be modified to incorporate the change.

Information about the alternative lifeline block proposal was sent to participants prior to the public presentations in Happy-Valley Goose Bay. Following the presentations in Happy Valley-Goose Bay the Board directed NLH to provide additional information to those who made presentations as well as to the Mayors of all affected communities. NLH provided this information on December 19, 2003 (Information #21) and, by letter on March 2, 2004, confirmed that no enquiries or comments, either verbal or written, were received on the lifeline block proposal.

In final submission (pg. 43) the CA supported a change in the lifeline block consistent with the three-tier proposal. In an effort to resolve the concerns of those most affected the CA recommended that the proposal be put into effect on a one year trial basis. If residents are satisfied following that one year trial the proposal can be adopted into the future. Lacking such support a new lifeline can be developed which is consistent with the findings of NLH's report.

NLH submitted that the proposal to increase the lifeline block to reflect seasonal usage, without increasing the rural deficit, is a reasonable compromise and meets some of the concerns of the customers with respect to increased consumption in the colder months. NLH leaves the question of whether the lifeline block should be increased or maintained at the current 700 kWh per month to the judgment of the Board. (Final Argument, NLH, pgs. 68/28-31; 69/1-3)

The Board notes that the alternate lifeline block proposal set out in NLH's report, determined from a survey of its rural isolated customers, more closely matches the seasonal consumption patterns of rural domestic customers than the current lifeline block. Currently these customers have access to an annual block of 8,400 kWh (at 700 kWh per month). Under the lifeline block proposed in NLH's report the annual lifeline block allocation will increase to 10,200 kWh, which means that these customers will have access to an additional 1,800 kWh at NP's domestic rate, instead of at the higher energy rate charged for consumption over the existing lifeline block. In the Board's view the proposed lifeline block based on seasonal consumption better reflects the intent of the lifeline block policy, which is to provide for necessary monthly household requirements, excluding space heating.

The Board acknowledges the recommendation of the Mediation Report that any changes to the lifeline block should maintain revenue neutrality and hence not increase the rural deficit. NLH's October 31, 2003 proposal incorporated this recommendation by increasing the rate charged for electricity usage above the lifeline block to recover the shortfall. The Board notes however the wording of the direction from Government regarding the continuance of the lifeline block and, in particular, the direction that "*subsequent monthly energy blocks for these customers be charged incrementally higher rates <u>as historically structured and determined</u>*." The Board interprets this direction to mean that it must continue the existing structure and determination of the rates above the monthly lifeline block. The existing three-tiered block rate structure will therefore be continued with the rates determined as in the past. As directed by Government, the rates above the lifeline block will increase by the average rate change approved by the Board for NP's Island Interconnected customers, consistent with existing policy.

In considering changes to rural rate policies the Board also has to be cognizant of the impact of these changes on the amount of the subsidy that has to be paid by the Labrador Interconnected customers and by the customers of NP. In its report NLH indicated that the implementation of the proposed seasonal lifeline block in conjunction with the existing inverted rate structure would increase the rural deficit by approximately $66,000. As discussed above the Board has been directed to continue the existing rate structure for consumption above the lifeline block and the determination of associated rates. As a result the Board is not able to accept the recommendation of the Mediation Report with respect to revenue neutrality when considering any changes to the lifeline block. However, as the Board is satisfied that the proposed seasonal lifeline block better reflects the necessary monthly household electricity requirements, excluding space heating, for Rural Isolated Domestic customers, the Board finds any corresponding increase in the rural deficit is justified. The Board also accepts NLH's position that this rate structure should remain in place until its next general rate application.

The Board will direct the implementation of a Seasonal Lifeline Block for NLH's Rural Isolated Domestic customers, both Island and Labrador, as set out below:

Seasonal Lifeline Block for NLH Diesel Systems		
Month	**Existing Lifeline (kWh)**	**Alternative Seasonal Lifeline Including Hot Water (kWh)**
January	700	1,000
February	700	1,000
March	700	900
April	700	900
May	700	800
June	700	800
July	700	700
August	700	700
September	700	700
October	700	800
November	700	900
December	700	1,000
Total kWh	**8,400**	**10,200**
Monthly Average kWh	**700**	**850**

Rural Isolated Domestic customers will continue to pay the same rate as NP's domestic customers for consumption within the Seasonal Lifeline Block. The existing block structure for these customers for energy consumption above the Seasonal Lifeline Block will be maintained. The existing policy of automatically adjusting the rates for consumption above the lifeline block by the average rate change approved by the Board for NP will continue to apply.

4. Preferential Rates

A number of general service customers in NLH's Rural Systems, including Government agencies, fish plants, churches and municipal buildings, benefit from preferential rates. In Order No. P. U. 7(2002-2003) the Board found that these preferential rates are discriminatory and ordered NLH to increase rates to the Federal and Provincial Governments to recover the full costs of providing service in rural areas. The elimination of preferential rates for Federal and Provincial Government departments commenced in September 2002, resulting in an estimated annual reduction in the rural deficit of $1,000,000. (Pre-filed Evidence, W. E. Wells, Discussion Paper on Hydro Rural Deficit Issues, pg. 6) The Board also ordered continuation of remaining preferential rates at that time but accepted NLH's proposal to present to the Board at its next general rate application a plan to phase out preferential rural rates.

When fully implemented the elimination of preferential rates on NLH's Rural Systems was estimated to reduce the rural deficit by approximately $2,000,000. (Pre-filed Evidence, W. E. Wells, Discussion Paper on Hydro Rural Deficit Issues, pg. 7) NLH's Discussion Paper showed the targeted cost recovery levels over five years and the impact of rate increases on customers benefiting from preferential rates as follows:

Island Interconnected			
Customer	**Current Recovery**	**Target Recovery[1]**	**Rate Increase[2]**
Burgeo School	41%	100%	144%
Burgeo Library	50%	100%	100%
Isolated Systems			
Customer	**Current Recovery**	**Target Recovery[1]**	**Rate Increase[2]**
Schools			
Rate 0-10 kW	20%	100%	400%
Rate Over 10 kW	26%	100%	285%
Health Facilities			
Rate 0-10 kW	31%	100%	223%
Rate Over 10 kW	37%	100%	170%
Fish Plants			
Rate Over 10 kW	17%	45%	165%
Churches and Community Halls			
Rate 0-10 kW	21%	45%	114%
Rate Over 10 kW	25%	45%	80%
Other General Service			
Rate 0-10 kW	31%	45%	45%
Rate Over 10 kW	40%	45%	13%
Street and Area Lighting			
Health Facilities and Schools	32%	100%	213%
Regular	36%	50%	39%

[1] Recovery target is the based on the applicable cost recovery level.
[2] Increases are based on preliminary estimates and are subject to change however are believed to be indicative. These increases do not include any general rate increase which would be applicable to all customers.

In July 2003 Government issued certain directions to the Board under the authority of Section 5.1 of the *EPCA*, and in particular with reference to preferential rates directed the Board to:

> "i) *continue to charge fish plants in diesel-served communities and with demand of 30 kilowatts or more the Island interconnected electricity rate;*

ii) *continue to charge churches and community halls in diesel-serviced communities the diesel domestic electricity rate and to continue to charge various customer groups in diesel communities, rates calculated on the same basis as existing practices;*

vii) *continue to charge the preferential electricity rates historically charged to provincial government facilities, including schools, health facilities and government agencies, in rural isolated diesel serviced communities and the Burgeo school and library."*

NLH noted the Board received clear direction from Government that the rural deficit along with preferential rates should continue and furthermore any deficit in serving rural customers as directed should continue to be funded by the customers of NP and Labrador Interconnected customers. (Final Argument, NLH, pg. 71/13-18)

No intervenors commented specifically on preferential rates directed by Government.

The Board acknowledges the direction of Government, under Section 5.1 of the *EPCA*, concerning preferential rates for NLH's Rural customers and the funding of this aspect of the rural deficit, which is to be borne by NP's customers and Labrador Interconnected customers. The Board notes the current cost recovery rate on the Isolated Systems is between 17-40% and preferential rates contribute approximately $2,000,000 annually to the rural deficit. While cross-subsidization to reflect equal rates among similar classes of customers is an accepted regulatory practice, good rate design avoids providing one customer a substantially better rate than another comparable customer receiving an identical service. The Board notes its finding in Order No. P. U. 7(2002-2003) that preferential rates are discriminatory. However, by virtue of the direction received from Government, the Board has no jurisdiction to make any further order with respect to preferential rates.

The Board accepts NLH's proposals for preferential rates for certain customers on the Island Interconnected and Isolated Systems as being in accordance with Government directives.

5. Rates for Isolated General Service Customers

In Order No. P. U. 7(2002-2003) the Board accepted NLH's proposal to address at its next rate application the elimination of the lifeline block for general service (GS) customers on Isolated Systems, in coordination with the implementation of a demand-energy rate structure for those customers.

In July 2003 the Government issued certain directions to the Board under the authority of Section 5.1 of the *EPCA*, and in particular with reference to Isolated GS customers directed the Board to:

> *"(iv) proceed, as the Public Utilities Board determines appropriate, with implementation of a demand/energy rate structure for general service (commercial) customers in diesel communities, where such customers currently pay the diesel general service electricity rate. While the rate changes can include elimination of the lifeline block for these general service customer, the new rates should target the current cost recovery levels for these customers;"*

The implementation of this direction was considered as part of the mediation process. The Mediation Report recommended the following:

> *"h. G.S.2.3 and G.S.2.4 customers on the Isolated Systems should be consolidated into the G.S.2.2 rate class."*
>
> *"i. The proposed three-year phase-in of the demand/energy rate for Rural General Service Customers should be implemented, including elimination of the lifeline block for those customers."*

NLH is proposing 2004 rates for Isolated GS Customers based on the Board's direction in Order No. P. U. 7(2002-2003) and targeting current cost recovery levels for these customers. To mitigate customer impacts NLH proposed that the phase-in of targeted rate components be implemented over three years. NLH also requested that the rates schedules for these customers would automatically come into effect January 1 of each year as outlined in its Application, with the provision that adjustments could be made should a general rate application be filed in the intervening period.

The Board accepts NLH's proposal for rates for Isolated GS Customers as being in accordance with Order No. P. U. 7(2002-2003) and with Government directives as set out above.

The Board will approve NLH's proposal for the phase-in of a demand-energy rate structure, including the consolidation of rate classes and the elimination of the lifeline block, for GS customers on the isolated diesel systems over a three year period. The Board will direct NLH to file for approval a revised Schedule of Rates for each proposed rate change set out in the three year plan. Rates for these customers will continue to be adjusted by the average rate of change granted to NP in any general rate application.

6. Energy Tax Proposal

The Towns of Labrador City and Wabush propose that the rural deficit be collected by the imposition of a tax collected on all electrical production in the Province, whether exported or not, as authorized by Section 92A of the *Canadian Constitution Act*. The rural deficit is, according to the Towns of Labrador City and Wabush, essentially a social tax collected from certain consumers, which is in effect discrimination against those who pay the burden of the subsidy. Other presenters supported the position of the Towns of Labrador City and Wabush during the public presentations in Labrador City, in particular Mayor Letto of Labrador City and Mayor Farrell of Wabush. Mr. Jamie Snook of the Combined Councils of Labrador also supported this proposal during his presentation to the Board in Happy Valley-Goose Bay.

The Towns of Labrador City and Wabush submit that Section 83 of the *Act* gives the Board the authority to recommend the necessary course of action, including legislation, that best ensures appropriate and fair utility rates. Section 83 of the *Act* states:

> "*Where a public utility or person proposes a change in a law relating directly or indirectly to the property or operations of a public utility, the proposed change may be submitted to the board, and the board may take evidence and give public hearings, and the board may recommend the*

> *bills that will in its judgment protect the interests of the public and the public utility, and transmit the bills to the attorney general."*

The Towns of Labrador City and Wabush stated *"…the Board would be in dereliction of its obligation to electrical consumers if it imposed the rural rate subsidy as requested by NLH rather than recommending taxation legislation to include a much wider base on which to impose the burden of such subsidy. It is submitted that the appropriate base is all electrical production of the Province, including that exported from the Province."* (Brief of Argument, pg. 30, para. 87). Effectively, the proposal of Towns of Labrador City and Wabush has two parts:

1) Firstly, the Board should reject recovery of the rural deficit in the manner proposed by NLH; and
2) Secondly, the Board should recommend the introduction of taxing legislation to recover the rural deficit from all electrical production in the Province.

None of the parties to the hearing commented on the Towns of Labrador City and Wabush proposal. In final written submission (pg. 15) Board Hearing Counsel submitted that the Board is not a taxing authority and, since this issue is in the exclusive domain of the Provincial Government, this issue would be more properly addressed to Government.

With respect to the first aspect of the Towns of Labrador City and Wabush request, recovery of the deficit as proposed by NLH, the Board refers to the Government direction to the Board in July 2003. (Appendix C) This direction was again made pursuant to the statutory authority to direct the Board with respect to the subsidization of rural rates, as set out in Section 5.1 of the *EPCA*. The direction specifically states:

> *"Under the authority of section 5.1 of the Electric Power Control Act, 1994, the Lieutenant Governor in Council hereby directs the Board of Commissioners of Public utilities to:*
> *…(v) continue to fund the financial deficit resulting from providing electrical service to Newfoundland and Labrador Hydro's rural customers through the electricity rates charged to Newfoundland and Labrador Hydro's other electricity customers, including its Labrador Interconnected retail customers and Newfoundland Power, but excluding the industrial customers;…"*

This direction confirms the position of the legislature to continue funding the rural deficit in the current manner and removes any discretion of the Board to consider alternatives. By virtue of this direction, made with clear statutory authority, the Board is required to accept the proposals of NLH with respect to the recovery of the rural deficit and must reject the first proposition of the Towns of Labrador City and Wabush.

With respect to the proposal that the Board should recommend the introduction of taxing legislation to recover the rural deficit from all electrical production in the Province, the Board notes that the Towns of Labrador City and Wabush made this same request during NLH's 2001 general rate hearing. The Board rejected this proposal in Order No. P. U. 7(2002-2003), stating that taxation is the prerogative of Government beyond the purview of the Board. Section 83 of the *Act* provides the Board with jurisdiction to recommend legislative changes where a person proposes a change in law relating directly or indirectly to the property or operations of a public utility. The Board does not accept that this section provides the Board with the broad jurisdiction to recommend legislation with respect to the issue of taxation. Therefore, the Board will reject the proposal of the Towns of Labrador City and Wabush to recommend taxing legislation.

The Board will not recommend taxing legislation with respect to the recovery of the rural deficit, as proposed by the Towns of Labrador City and Wabush.

IX. RATES ISSUES/RATE DESIGN

1. Wholesale Demand-Energy Rate to NP

i) Historical Perspective

NP initiated a proposal at NLH's 1990 rate referral requesting a demand-energy rate structure from NLH. The primary concern for NP at the time was the inability of NLH to send the correct price signal through an energy-only rate. NP argued this price signal was of critical importance at the time to design and implement effective demand side management (DSM) programs being contemplated by NP in response to significant forecasted rate increases. In addition NP argued that NLH's rate structure should expressly or implicitly have a demand charge component to track costs more closely. (1990 Report on NLH's Rate Referral, pg. 76) Mr. Brockman, NP's expert witness in this hearing, also appeared as NP's expert witness on this issue during NLH's 1990 rate referral. His opinion on NLH's energy-only rate to NP was summarized in the Board's resulting report (pg. 77):

> *" With an energy-only rate however there are no immediate savings to NLP and its customers for reducing its demand on the Hydro system. Because NLP applies demand charges to its larger customers to control their demands, NLP will actually lose money if those customers respond properly.*
>
> *Another fact that the Board should consider is the effect of the Hydro energy-only rate on NLP rates. It forces NLP to have energy rates that are too high and demand rates that are too low. If NLP is to achieve proper matching between the distinct cost causation effects of demand and energy, the Board should recommend that Hydro develop a rate structure that includes these important components."*

The Board concluded that it was important that NLH present for consideration of the Board a rate to NP with a demand charge component. In its June 1990 report to Government the Board recommended that NLH present at its next rate hearing "*whatever information it may have with regard to a rate with a demand charge component for discussion and determination of a date for filing a rate proposal.*"

In its 1991 rate referral NLH proposed an energy-only rate but filed alternative rate forms for consideration by the Board. In its April 1992 report to Government the Board recommended an energy-only rate for NP but also recommended that *"Hydro and NP develop an acceptable rate form for review by the Board at the hearing to be held on Hydro's cost of service methodology."* At the 1992 generic COS hearing NLH and NP informed the Board that the development of an alternative rate form for NP was not yet finalized but the utilities continued to negotiate on the matter. In its February 1993 report to Government the Board did not recommend a time limit on the submission of the proposed rate form.

The issue was raised again at NP's 1996 general rate proceeding and in Order No. P.U. 7(1996-97) the Board ordered NP to follow the direction given in the Board's 1993 generic COS report and consult with NLH on the development of an acceptable rate form containing an appropriate division of demand and energy costs. The terms of reference for NP's 1998 hearing, which was called on the Board's own motion, stated that the Board wished to receive evidence from NLH on a demand-energy rate for power purchased by NP. At the pre-hearing conference in September 1998 the Board heard representations from NP, NLH, the IC and Government that the recently announced Energy Policy Review to be undertaken by the Government would be dealing with, among other things, existing pricing methodologies and practices, current pricing structures on the Island and in Labrador, future pricing and competition, and average versus marginal cost pricing. It was argued that the planned hearing would duplicate the efforts of the ongoing Energy Policy Review and that the Board should delay consideration of these matters. The Board decided at the time to defer the consideration of those matters, including the development of a demand-energy rate structure for NP.

At its 2001 general rate hearing NLH proposed an energy-only rate for NP, with NLH stating *"Hydro and Newfoundland Power have reviewed this issue and both companies concur that an energy only rate to Newfoundland Power is still appropriate".* NP's position at that time was that *"while a demand-energy rate may be theoretically desirable in many circumstances, introducing such a rate structure into the power purchase arrangement between Newfoundland Hydro and Newfoundland Power is neither necessary nor desirable in the current environment."* [Order No. P. U. 7(2002-2003), pg. 147]

In Order No. P. U. 7(2002-2003) the Board stated:

> *"The Board finds it is not in a position at this time to make a final determination on the issue of whether an energy only rate is appropriate for purchase of power by NP from NLH. The Board has noted the positions of the parties but further evidence will be required from both NP and NLH before making a final decision. If the Electricity Policy Review currently underway does not address this issue as put before the Board at the pre-hearing conference in September 1998, the Board will address it at NLH's next general rate application. At that time the Board will expect NLH to file supporting evidence with its application to address the demand energy pricing issues raised in this hearing."*

ii) Current Application

In this Application NLH proposed an energy-only rate for NP of 53.62 mills per kWh, a 12.0% increase in the base rate currently paid by NP. (Revised Evidence, S. D. Banfield, Oct. 31, 2003, pg. 3/3-10) As directed in Order No. P. U. 7(2002-2003) NLH also filed further evidence regarding a demand energy rate structure for NP with its Application. Stone and Webster Management Consultants, Inc. (SWMC) completed a report <u>Review of Rate Design for Newfoundland Power</u> for NLH. (Exhibit RDG-2) This report addressed the relevant issues in implementing a demand-energy rate to NP and made the following findings (pg. 17):

- An energy-only rate to a wholesale customer the size of NP is an anomaly in terms of current industry practice.
- The ability to send a proper price signal to NP is a key element in controlling island interconnected peak and conserving capital costs.
- In order to send the proper price signal, NLH must accept a degree of risk and the level of risk that NLH assumes should be commensurate with the response in terms of conservation efforts by NP.
- A demand-energy rate can be designed that does not permit a windfall to either NLH or NP due to weather variations.

- A demand-energy rate can be designed that will allow both NLH and NP to achieve virtually the same operational efficiencies as under the current energy only rate structure.

The report recommended that NLH perform analyses for the purpose of establishing a demand-energy rate for service to NP. It also recommended that the results of these analyses be shared with NP and that the proposed demand-energy rate be based on discussions between both utilities. The report did not recommend a specific demand-energy rate design for NP but does provide a Sample Rate design based on the principles outlined in the report. (Exhibit RDG-2, pgs. 15-16)

In respect to questioning from the CA and the Board during cross-examination Mr. Greneman, NLH's COS expert stated:

> A. (Mr. Greneman) …a demand energy rate, even with one customer class is fully justified based upon the fact that I believe it's Hydro's responsibility to pass on its cost as it incurs its financial obligations. And also to encourage load management on the Island to increase the overall efficiency of capital resource allocation on the Island and to lower the use of natural resources when that can be done.
> (Transcript, Nov. 14, 2003, pg. 47/9-17)

> A. (Mr. Greneman) In my view, by virtue of the size of NP and its relationship with Hydro, it is the standard way in the industry for the supplier to sell to a utility, such as NP. I think any other rate form does not get the signal across, is not appropriate for this type of relationship that exists between such large entities. The standard way of doing it is indeed a demand energy rate and in my view nothing else is quite correct.
> (Transcript, Nov. 17, 2003, pgs. 39/19-25; 40/1-3)

In PUB-149 NLH identified the outstanding issues that would need to be resolved before implementation of a demand-energy rate to NP, including: (i) the degree of risk to be assumed by NLH; (ii) an appropriate weather normalization methodology; (iii) the treatment of NP's generation; and (iv) appropriate costing and billing determinants. The types of analyses that should be performed according to NLH include: (i) the effects of variations in NP's hydraulic generation and native load, individually and together; (ii) the effects of varying levels of demand and energy rates; and (iii) quantification of the intrinsic error in the weather normalization formula.

NLH identified a two-month time frame as being adequate to address these issues. Subject to resolution of these issues NLH proposed that a demand-energy rate structure for NP be implemented instead of the energy-only rate as filed by NLH. (Revised Evidence, S. D. Banfield, Oct. 31, 2003, pg. 3/22-28)

In final argument (pg. 84) NLH submitted that there is sufficient information before the Board such that an appropriate demand-energy rate as proposed by NLH could be implemented as of the Order arising from this hearing should the Board desire a demand component as part of NP's rate structure.

NP did not support the implementation of a demand-energy rate structure, and took specific issue with the Sample Rate as proposed by NLH. NP's concerns with NLH's proposal are summarized below: (Pre-filed Evidence, B. Perry and L. Henderson, pgs. 1-2)

- The Sample Rate creates an incentive for NP to modify its seasonal storage patterns to minimize purchase power expense, increasing the likelihood of spillage and thereby increasing the overall cost of providing service to the Island Interconnected System.
- The Sample Rate significantly increases the potential financial impact of forecast variances. The forecast demand and energy variances under the Sample Rate could result in an $8,300,000 decrease in pre-tax earnings, compared to forecast variances of $900,000 under the existing energy-only rate.
- The Sample Rate significantly increases volatility in NP's rate of return on rate base. The return on rate base could be affected by +47 basis points to –77 basis points, exceeding the ±18 basis points allowed by the Board. This could result in rate instability.

NP's position was that the Sample Rate would not benefit customers. According to NP the Sample Rate will not influence retail rate design, will promote less efficient use of generation resources, will not promote cost effective Demand Side Management, and will reduce rate stability. NP stated that continuation of the existing energy-only rate structure is most appropriate.

NP also filed expert evidence which reviewed the existing energy-only rate compared to the Sample Rate proposed by NLH. This report concluded the following: (Pre-filed Evidence, L. Brockman, pg. 1)

- The energy-only rate is superior to the Sample Rate in collecting revenue requirements for a fair return.
- The energy-only rate fairly recovers NLH's cost-of-service revenue requirements from NP.
- A demand-energy rate fairly apportions cost between NLH's Industrial customers, but is not needed for NP, since it is the only customer in its class.
- The current energy-only rate is superior to the Sample Rate in promoting energy efficiency. An inappropriate emphasis on demand charges in the Sample Rate design contributes to inefficiency in the Sample Rate energy charges.
- The energy-only rate allows NLH and NP to optimize the use of their hydraulic and thermal generation resources. The proposed Sample Rate would send an inappropriate pricing signal that would encourage NP to modify its hydraulic storage patterns to reduce costs. NP indicates that the storage modification would increase the likelihood of spillage and result in a less than optimal use of generation resources.
- NP's current rate designs reasonably reflect the Island Interconnected System costs of demand and energy. The Sample Rate will not change NP's rate designs.

- There is no evidence to support additional cost effective demand side management on NP's system. The available evidence indicates that demand management would have little effect on NLH's future generation plans.
- The Sample Rate will encourage NP to spend up to $84 per kWh to reduce peak demand when NLH has provided evidence that $28.20 per kWh is too much to pay for peak demand through interruptible rates.
- The energy-only rate creates a more stable revenue stream for both NLH and NP than the Sample Rate. The energy-only rate, therefore avoids the costs of dealing with additional revenue volatility. There are no benefits to customers of imposing additional revenue volatility on NP.
- Both the Sample Rate and the energy-only rate are understandable for a large customer such as NP. However, the energy-only rate is more practical to administer because it is less complicated.

Mr. Brockman concluded that overall, the current energy-only rate outperforms the Sample Rate when evaluated using generally accepted principles of good rate design. In final argument (pg. E-42) NP summarized its reasons why a demand-energy rate should not be implemented, stating that the movement to a demand-energy wholesale rate would result in increased earnings volatility for the utilities, reduced rate stability for customers, and provide no benefit to customers.

The CA's expert Mr. D. Bowman agreed with the implementation of a demand-energy rate structure for NP and supported the implementation of the rate design as proposed by NLH stating that "*it represents a significant improvement over the energy-only rate in place today.*" (Pre-filed Evidence, D. Bowman, pg. 12/16-17) During direct examination Mr. D. Bowman stated:

> A. (Mr. D. Bowman) …it's widely accepted practice, it's consistent with the principle of ensuring rates reflect costs and a signal cost separately and customer energy demand charges, you should be doing that where it's practical to do so. Now, in that regard, Hydro has proposed a demand energy rate. All the expert witnesses have reviewed it, I think all of the witnesses are more or less in favour with it, in favour of the rate proposed with some minor modifications with the exception—that is with the exception of Newfoundland Power. Newfoundland Power has primarily the same objective it had during the last hearing that related to the revenue stability issue, but I believe there's strong—it meets the primary criterion and that is that it recovers the revenue requirement. It is fair in a sense that it reflects both the services provided by Hydro to Newfoundland Power, that is capacity and energy and it sends an efficient price signal in the sense that an attempt has been made to reflect the fact that demands are higher in the winter and that it's priced close to marginal energy costs on the energy charged. And the over-riding reason is that certainly Newfoundland Power appears to be the outlier in not having a demand energy rate for a customer of this size, so there's strong regulatory precedent to have such a rate.
>
> (Transcript, Nov. 17, 2003, pgs. 46/3-25; 47/1-7)

The IC's experts Mr. P. Bowman and Mr. Osler testified during cross-examination that it would be the norm that large wholesale customers such as NP would have both demand and energy charges. Exceptions noted by Mr. P. Bowman were the Yukon and the Northwest Territories, which involve isolated diesel systems. Mr. P. Bowman, the IC's COS witness, stated in cross-examination by NLH Counsel:

> A. (Mr. P. Bowman) Absent a demand energy rate for Newfoundland Power, there is no cost tracking to changes in the peaks it imposes on the system, which is very different than the situation of Industrial Customers where there is some form of cost tracking. It's a striking difference. I'm not sure whether incremental costs is the underpinning for it, as much as just ensuring that rates track cost and relative loads imposed on the system as we go forward. Incremental cost in regards to the demand is somewhat of a more difficult concept, but certainly in regards to tracking the costs of the higher peaks and the relative uses by various customers, a demand energy rate would allow for some form of reflection of the peaks that are imposed by Newfoundland Power in the rates that they pay.
>
> (Transcript, Nov. 13, 2003, pgs. 115/16-25; 116/1-9)

Prior to considering the issues surrounding the design and implementation of a demand-energy rate for NP, it is necessary to first consider and decide whether a demand-energy rate should be ordered by the Board for NP. This issue has been before the Board since 1990 and NP and NLH have not yet come to an agreement on an acceptable demand-energy rate structure. The Board is satisfied that it has sufficient evidence before it as a result of this proceeding to make a determination on this question.

With the exception of NP's expert there appears to be consensus among the COS experts that the existing energy-only wholesale rate does not reflect accepted cost causation principles. The Board notes the definitive positions expressed by the COS witnesses for NLH, the CA and the IC that a wholesale rate with a demand and energy charge should be implemented by NLH for NP.

The Board does not agree with NP that a demand-energy rate would not provide any benefit to customers. While NP's customers of today may not see any direct benefits in terms of lower rates, the potential for NP to respond to the demand-energy rate by implementing load management programs has the potential in the longer term to result in lower system costs, and hence lower rates. These potential system benefits are important in terms of conserving both capital and natural resources. The Board notes NP has stated that it will not change its retail rate design in response to the implementation of a demand-energy rate. This position is not a determining factor in the Board's decision to approve a demand-energy wholesale rate as part of NLH's rate structure to its customers. After the introduction of this rate structure NP can take whatever steps it deems necessary in the context of its own rate structure.

Based on the evidence, the Board is persuaded that the implementation of a demand-energy rate by NLH for NP's purchased power is appropriate. Such a rate will distinguish between costs incurred by NLH that vary with changes in the system's output of energy, and costs that vary with plant capacity, and therefore the maximum demands on the system. NLH must be prepared to meet and incorporate these demands in its system planning. The potential for improved efficiency on the system and the ability of a demand-energy rate to send a proper price signal by tracking system costs as they are incurred are, in the Board's view, the most important criteria in considering whether a demand-energy rate should be implemented. The implementation of a demand-energy rate is also consistent with the power policy of the province as set out in Section 3(b)(i) of the *EPCA*. This provision stipulates that all sources and facilities for the production, transmission and 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.

The Board acknowledges NP's position on this issue and the potential effects of implementing a demand-energy rate on NP. The Board notes that NP's COS expert Mr. Brockman was not opposed to the concept of a demand-energy rate for NP but disagreed with the Sample Rate proposed by NLH:

> Q. (Comm. Whalen): I take it from your evidence that your summary position is that the sample rate that's been proposed at some point along the way by Hydro, should not be implemented? That's your –
> A. (Mr. Brockman): That's correct.
> Q. I don't get the distinct impression, though, that you're opposed to a demand energy rate for Newfoundland Power, it's the sample rate that you don't –
> A. If the rate were properly designed with taking into account of marginal costs and you could solve the volatility problem, I mean, I would take the same position I think as I took in 1990 that perhaps it is a good idea.
> (Transcript, Nov. 18, 2003, pgs. 136/23-25; 137/1-13)

The Board agrees that the evidence supports the conclusion that a demand-energy rate would result in the potential for increased earnings volatility for the utilities. NLH proposed one way of addressing this issue from its perspective with a minimum billing demand set at 98% of the 2004 COS forecast for NP's peak native load less generation credits. The Board does not view the potential for earnings volatility for NP as a reason to not implement a demand-energy rate. The Board notes there are mechanisms available to deal with the variances in purchased power expenses and the impact on NP's earnings if necessary. This is an accepted rate form in most other jurisdictions. The introduction of a demand-energy rate for NP would result in NP facing similar business risk to comparable utilities with the same wholesale rate structure.

As to whether the introduction of a demand-energy rate will result in reduced rate stability for consumers, the Board is not convinced this would be the case. While rate stability to consumers is always an important consideration for the Board, there are mechanisms to deal with rate stability issues if and when they arise. The Board notes there is no evidence to suggest that, absent the RSP, the current energy-only rate would result in more rate stability for consumers than the proposed demand-energy rate.

The Board finds that the introduction of a demand-energy rate by NLH for NP's purchased power is appropriate.

Although the Board has found that a demand-energy rate should be implemented for NP the Board is not convinced that it has sufficient evidence before it to implement such a rate as of this Decision and Order or that the rate could be implemented within the time period contemplated by NLH. In the Board's view there are a number of uncertainties surrounding the design of the demand-energy rate and also with respect to specific issues that need to be resolved between NLH and NP prior to implementation of such a rate. The outstanding issues and the Board's findings are discussed below.

While many of the experts accepted that a demand-energy rate should be implemented, there was insufficient evidence outlining details of an implementation proposal. As set out above, NLH stated in PUB-149 that there were a number of outstanding issues to be resolved before a demand-energy rate could be implemented. However, in oral argument Ms. Greene stated that, with the acceptance of the proposed Sample Rate outlined by SWMC, there were two remaining unresolved issues with respect to the implementation of a demand-energy rate to NP. (Transcript, Jan. 16, 2004, pg. 195/1-25) These two issues, which could be resolved in one month according to NLH, were: (i) ensuring adequate metering was in place; and (ii) agreement on the use of a weather normalization mechanism.

In final argument (pg. E-36) NP stated:

"The introduction of a demand-energy wholesale rate structure for Newfoundland Power would require resolution of the following implementation issues:

1) Design of a reasonable demand-energy rate based upon the characteristics of the Island Interconnected System;
2) Development of a weather normalization methodology for demand;
3) Month of Implementation to ensure calendar year revenue neutrality while moving from the energy-only rate to a demand-energy rate;
4) Creation of a reserve to ensure Newfoundland Power is permitted to recover its annual purchased power expense and earn a just and reasonable rate of return on rate base; and
5) Resolution of some minor metering issues."

NP also argued that any attempt to design and implement a demand-energy rate without a marginal cost study would require the Board to guess at the appropriate demand-energy balance. According to NP the Board should await the completion of a long-run marginal cost study and a retail rate design study, which will incorporate the results of a load research program currently being undertaken by NP. 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. (Brief of Argument, NP, pg. E-43)

While the CA and the IC submitted that a demand-energy rate should be implemented immediately they did not discuss the implementation issues raised by both NLH and NP.

The Board is not persuaded that a marginal cost study is needed to design an initial demand-energy rate as the existing 2004 COS study provides the required information. The Board notes the general agreement of the parties, with the exception of NP, on this issue. The results of a marginal cost study when done can be used to reassess the demand-energy rate at NLH's next general rate application in conjunction with other information that will be available.

The Board notes that the Application was filed on the basis of an energy-only rate for NP. The demand-energy rate referred to in the hearing as the Sample Rate was an example of one rate that may be set by the Board if Mr. Greneman's approach were accepted. The Board is not satisfied that the evidence received on the implementation of a demand-energy rate was sufficient to permit the Board to direct that the Sample Rate or some other rate structure be implemented as of this Decision and Order. The Board finds that the issues outlined by both NP and NLH require further exploration before a demand-energy rate can be implemented.

The Board is also concerned that additional issues may arise once the details of a demand-energy rate are considered. The Board notes that the proposed Sample Rate is based on the Greneman Report, which recommends that information should be shared with NP to carefully determine an appropriate demand-energy balance and impacts on revenue streams. (Exhibit RDG-2, pg. 13) The Board is not satisfied that the outstanding issues have been sufficiently addressed to allow the introduction of the rate in this Decision and Order.

The Board will require NLH to file, no later than July 31, 2004, using the embedded COS for the 2004 test year adjusted for this Decision and Order, an application for the demand-energy rate to be implemented for NP on January 1, 2005. The application and supporting documents will fully address, among other things:

- **i. The degree of risk to be assumed by NLH;**
- **ii. The expected relationship between the risk assumed by NLH and the response in terms of conservation efforts by NP;**
- **iii. An appropriate weather normalization mechanism, with quantification of the intrinsic error in the formula;**
- **iv. The treatment of NP's generation as has been determined by this Decision and Order;**
- **v. Appropriate costing and billing determinants;**
- **vi. The use of adequate metering, or, in its absence at any supply points, an appropriate estimation formula;**
- **vii. The effects of variations in NP's hydraulic generation and native load, individually and together; and**
- **viii. The effects of varying levels of demand and energy rates for a range of usage patterns.**

In the meantime, NLH will continue to charge NP an energy-only rate as proposed in its Application, revised to reflect the findings of the Board in this Decision and Order.

The Board encourages NLH to provide NP with the details of the application well in advance of its filing and suggests that NLH and NP meet to discuss implementation issues. Any proposals which are the result of a consensus between NLH and NP should be noted in the application.

2. Interruptible *"B"* Contract for Abitibi Consolidated Company of Canada - Stephenville

From 1993 to March 2003 NLH had an interruptible contract with Abitibi Consolidated Company of Canada in Stephenville. This contract allowed NLH to interrupt 46 MW of capacity at the Stephenville Mill on certain terms and conditions. For this right to interrupt NLH paid Abitibi Consolidated Company of Canada - Stephenville the sum of $1,300,000 annually. NLH did not renew this contract in March 2003 on the basis that, since it has sufficient capacity within its system at present with the new sources of supply that have come on stream, there is no requirement for access to additional capacity through an interruptible arrangement. (Final Argument, NLH, pg. 76/19-27)

The question of whether it was appropriate to terminate the Interruptible B program was identified in the Mediation Report as one of the issues upon which the parties disagree. (Appendix H)

In final argument (pg. 35) the IC requested the Board direct NLH to make available to the IC a curtailable rate on terms and conditions essentially similar to those contained in the Interruptible B contract with Abitibi Consolidated Company of Canada - Stephenville which expired in March 2003. The IC submit that the Interruptible B program was the only significant demand side management effort by NLH and that it should not be discontinued on the basis of a temporary capacity surplus on the system. According to the IC the Stephenville Mill has conformed its operations and practices to accommodate this product and caution that the elimination of the program may potentially make it impractical for the reinstatement of the program in the future. The IC stated:

> *"In advance of a credible and properly reviewed System Resource Plan that assesses both supply and demand side options for the system, it is not now appropriate to terminate a long-term rate offering such as Interruptible B. Continued confidence of both Hydro and its customers in the long term presence of this type of rate offering should not be undermined at a time when, in the next very few years, major decisions on next generating plant must be made…"*
> (Written Argument, IC, pg. 36)

The CA submitted that, although empathetic to the IC's view that the Interruptible B program should continue, no evidence has been filed that would suggest that continuation of this program is beneficial to non-participating customers. As the marginal cost of capacity has not been identified, it is difficult to know the value of the Interruptible B load. The CA recommends that the Interruptible B program should be re-evaluated once the marginal cost of capacity is determined. (Final Submission, CA, pg. 31, para. 93)

NP did not take a position on the specific issue of reinstatement of the Interruptible B contract. The value of the contract itself was an issue in respect to NP's position on the wholesale rate structure and the sample demand-energy rate proposed by NLH. (Brief of Argument, NP, pg. E-33) In oral submissions NP stated that the issue of the Interruptible B rate should be dealt with in the context of a mediated process or generic hearing after NLH has completed a Marginal Cost Study and Retail Rate Design Study. (Transcript, Jan. 16, 2004, pg. 113/18-22)

Board Hearing Counsel submitted that the Board does have the jurisdiction to order the introduction of an interruptible program for a customer as part of the utility's approved rates. (Final Brief, Board Hearing Counsel, pg. 15)

The Board acknowledges the financial impact of the non-renewal of the Interruptible B contract on Abitibi Consolidated Company of Canada – Stephenville, as outlined by Mr. Guillot and Mr. Dean. (Pre-filed Evidence, M. Dean and J. F. Guillot, Sept. 2, 2003, pg. 6/11-15) According to Mr. Dean the loss of the revenue from the Interruptible B contract will result in an additional 7% increase to Abitibi Consolidated Company of Canada - Stephenville on top of the proposed increase of 22.6% resulting from the increase in base rates.

According to NLH the new supply sources (Granite Canal and two power purchase agreements with the Exploits River Hydro Partnership and Corner Brook Pulp and Paper Limited) provide the system with sufficient capacity within its near term planning horizon such that the Interruptible B contract is not needed. This fact is supported by the evidence which shows that the system will not be energy or capacity constrained until the years 2009 and 2011 respectively. (Pre-filed Evidence, J. R. Haynes, pg. 37, Table 8) When the existing agreement was negotiated in 1993 between NLH and Abitibi Consolidated Company of Canada's predecessor Abitibi-Price Inc. the electrical system was in a much different situation. The Board also notes that it does not have any evidence before it to assess the value of such a product to all consumers and whether the rate that was negotiated in 1993 is a fair and reasonable rate.

The Board acknowledges that rate stability is one of the regulatory principles to be considered but this must be weighed against other regulatory principles impacting the issue. The Board agrees with the position of NLH that, based on the evidence, access to power under the Interruptible B rate is not required. The Board finds that there is sufficient capacity in the system at the present time to support the energy and capacity needs of the Province. The Board accepts that Abitibi Consolidated Company of Canada - Stephenville may not be in a position to take advantage of such a rate in the future due to operational considerations but this factor will have to be assessed at that time. Nevertheless cost of service regulatory principles require that costs of regulated operations are prudent as well as used and useful in providing service. Costs associated with providing unnecessary capacity cannot be viewed as satisfying these principles. Therefore, the Board concludes the continuation of the Interruptible B program and/or the addition of a curtailable rate to the IC would be contrary to generally accepted sound public utility practice.

In the Board's opinion the need for and the value of an Interruptible B rate should be considered as part of an integrated planning process, where all alternatives for meeting anticipated system needs, both in the short and long term, are being considered. It is only in this context that the Board can be assured that the system planning is being undertaken on a least cost basis.

The Board will not order NLH to reinstate the Interruptible B rate for Atibiti Consolidated Company of Canada – Stephenville or to make a similar rate available to the IC.

3. Rules and Regulations for Service

In its Application NLH proposed three changes to the Rules and Regulations for Rural Customers consistent with the practice to have its rules and regulations for Rural Customers as similar as possible to those of NP. These proposed changes are outlined below: (Revised Evidence, S. D. Banfield, Oct. 31, 2003, pgs. 17-18)

a. Reduction in the Application Fee for Name Change

NLH is proposing that the wording for Regulation 9(o) be changed as follows:

"An application fee of $8.00 will be charged for all requests for Customer name changes and connection of new services. Landlords will be exempted from the application fee for name changes at Serviced Premises for which a landlord agreement pursuant to Regulation 11(f) is in effect."

b. Elimination of Statement Preparation Fee

NLH is proposing to remove clause 9(n) which charges a customer for the preparation of account statements for billing information prior to the most recent twelve months.

c. Extension of the Reconnection Fee

NLH is proposing to change its regulations to permit charging the reconnection fee to new customers where a reconnection of service is required subsequent to a request by a landlord to disconnect an apartment. New customers in apartments that are required to pay the reconnection fee will not be required to pay the application fee. NLH is proposing the following wording for Regulation 9(f):

"Where a service is Disconnected pursuant to Regulation 12(a), b(ii), (c), or (d) and the Customer subsequently requests that the service be reconnected, the Customer shall pay a reconnection fee. Where a Service is Disconnected pursuant to Regulation 12(g) and an Applicant subsequently requests that the service be reconnected, the Applicant shall pay a reconnection fee. Applicants that pay the reconnection fee will not be required to pay the application fee. The reconnection fee shall be $20.00 where the reconnection is done during normal office hours or $40.00 if done at other times."

A new clause 12(g) that defines disconnecting a service as a result of a landlord agreement will be added, as follows:

"Hydro may disconnect the Service to a rental premises where the landlord has an agreement with Hydro authorizing Hydro to disconnect the Service for periods when Hydro does not have a contract for Service with a tenant of that premises."

These proposed changes to the Rules and Regulations were the subject of the Mediation process and were agreed to by the parties in the Mediation Report. (Appendix H) The Board accepts the recommendations of the Mediation Report and further notes that the proposed changes are similar to those approved by the Board for NP in Order No. P. U. 19(2003). The Board supports consistency where possible in the application of Rules and Regulations to customers of NLH and NP.

The Board accepts NLH's proposed changes to the Rules and Regulations for Rural Customers.

4. Rate Change/Implementation

NLH requested that the rates to be implemented based on the Board's final ruling be effective for consumption on and after the implementation date as ordered by the Board and be the same rates as would have been effective on January 1, 2004, other than for Labrador Interconnected firm customers and Isolated Rural Customers. NLH proposed that the rates for Labrador Interconnected firm customers and Isolated Rural customers be effective for bills issued on and after the implementation date as ordered by the Board and be the same rates as would have been effective on January 1, 2004. (Final Argument, NLH, pg. 88)

In order to determine the final base rates to be charged customers, NLH will have to complete a final COS study incorporating any changes required as a result of this Decision and Order. In final argument (pg. 88) NLH proposed that the final COS be as filed in its revision dated October 31, 2003, adjusted to reflect only any 2004 capital budget additions that might be approved by the Board further to NLH's application of November 21, 2003, and the Board's findings in this Decisions and Order. NLH stated that it will circulate the final COS study flowing from the Board's Order to the parties. (Transcript, Jan. 16, 2004, pg. 49/12-15)

The Board acknowledges NLH's proposal that the rates to be implemented as a result of this Decision and Order be the same rates as would have been effective January 1, 2004, as proposed in its Application. Due to the timing and length of the hearing, implementation of rates as of January 1, 2004 was not possible. The effect of NLH's proposal is that its customers will not pay the full costs for electrical service for the 2004 test year, and hence NLH will not recover its revenue requirement for 2004. The Board is therefore cognizant of the effect on NLH of any future delay in implementing the rates that will flow from this Decision and Order. NLH has indicated that it will require approximately 4-6 weeks to complete an updated COS study and to re-file revised rates for the Board's consideration. Given the timing of this Decision and Order July 1, 2004 is, in the Board's view, the earliest and most practical date to implement rate changes for all customers. This date will also coincide with the RSP adjustment for NP's customers.

In order to finalize rates to be implemented as a result of this Decision and Order, NLH will be required to incorporate the decisions of the Board by:

- **i. adjusting its revenue requirement and calculation of rate base and rate of return on rate base;**
- **ii. revising its October 31, 2003 COS study for the 2004 test year;**
- **iii. revising its proposed Schedule of Rates for the various customer classes based on the updated COS; and**
- **iv. addressing the consumption on which the rates will be effective for the bills of NP, the IC, Labrador Interconnected firm customers, Island Interconnected Rural Customers and Isolated Rural Customers;**

and filing the above with the Board for approval.

X. OTHER ISSUES

1. Regulatory Oversight – Planning, Performance Measures and Reporting

In Order No. P. U. 7(2002-2003) the Board requested Grant Thornton to work with NLH to recommend suitable regulatory performance standards which would be used to measure operating efficiencies at NLH and form part of NLH's ongoing reporting to the Board. Grant Thornton's report Report on Regulatory Performance Measures for Newfoundland and Labrador Hydro was filed with the Board on July 17, 2003. (Information #4)

Grant Thornton noted NLH currently reports several performance indices to the Board on both a quarterly and an annual basis as part of its ongoing regulatory reporting requirements. The quarterly reports currently include statistics for System Average Interruption Frequency Index (SAIFI), System Average Restoration Index (SARI) and System Average Interruption Duration Index (SAIDI). NLH also reports annually the Derating Adjusted Forced Outage Rate (DAFOR), Weighted Incapability Factor and Customer Satisfaction Index. These performance indices primarily focus on the reliability of NLH's service. Grant Thornton recommended that these performance measures continue to be reported in the manner and frequency in which they have historically been provided to the Board.

In its report Grant Thornton identified other key performance indicators (KPIs) which were suggested would be of value and interest to the Board from a regulatory perspective. Grant Thornton recommended that NLH report annually to the Board on these additional KPIs listed below:

- Thermal conversion factor (MWh generated at Holyrood per barrel of oil-MWh/bbl);
- Hydraulic conversion factor (MWh generated per million cubic meters of water – MWh/MCM);
- Corporate operating, maintenance and administration expense (OM&A) per MWh generated;
- Generation OM&A per MWh generated;
- Generation OM&A per MW installed capacity;
- Transmission OM&A per km of transmission line; and
- Distribution OM&A per rural customer or per km of distribution line.

NLH proposed in final argument (pgs. 33-34) that the Generation OM&A should be measured on a per MW basis and not a per MWh basis as proposed in the report. Mr. Brushett stated that this proposed change did not cause him any major concern but that he was not certain if the performance measures found in the COPE database, which has been used as an information source and which would be used for comparison, contained a performance measure for OM&A per MW of installed capacity, but that there is one for MWh generated. (Transcript, Dec. 11, 2003, pg. 32/1-14)

Grant Thornton indicated that industry or inter-utility comparisons combined with internal benchmarking would provide better data for purposes of monitoring performance and targeting continuous improvement. Grant Thornton recommended that NLH review and propose to the Board appropriate industry or inter-utility comparisons for all recommended KPIs on which NLH has been directed to report. This recommendation was supported in the Mediation Report, where the parties agreed, inter alia, that

> *"aa. Hydro will propose a peer group of utilities and measures upon which to compare its performance not later than six months following the date of the Board Order in this proceeding. Upon approval thereof, Hydro will collect and report such measures for itself and the peer group annually beginning in 2005".*

The Board agrees with the recommendations of Grant Thornton with respect to the establishment of additional KPIs to be included as part of NLH's regulatory reporting to the Board. The measures as proposed will assist the Board in monitoring NLH's operational efficiencies. The Board also believes that the addition of the performance measure suggested by NLH (Generation OM&A per MW) would be useful to the Board in that it would provide another, but less volatile, measure of generation OM&A costs.

The Board also agrees that external benchmarking of NLH's KPIs to industry data or specific inter-utility comparisons will be of value to the Board. The Board accepts the recommendation of the Mediation Report regarding the establishment and reporting of performance measures based on a *"peer group"* of utilities. This is consistent with the Board's direction in Order No. P. U. 19(2003) in which NP was ordered to file a report suggesting a *"peer group"* of utilities upon which the Board can compare performance.

In recommending these KPIs Grant Thornton submitted the objective of KPI measurement is to establish an effective regulatory framework and process for monitoring NLH's operating efficiency on a go forward basis. With a view to achieving this objective, Grant Thornton recommended that NLH be asked to submit annual targets (or objectives) for each KPI being reported to the Board, together with the background support or rationale for the targets. Grant Thornton suggested the targets should be supported by or linked in some manner to certain business process improvement initiatives or arise from certain benchmarking analysis or inter-utility comparisons of performance. (Supplementary Evidence, Grant Thornton, Dec. 5, 2003, pg. 2/5-12)

Mr. Wells described the *"strategic direction"* taken by NLH, commencing in January 2000, as an effort to "*...optimize performance in all activities throughout the corporation."* In describing the process to be undertaken by NLH, Mr. Wells stated that, *"Corporate performance is to be optimized through an assessment of business processes and the identification of changes necessary to improve performance as measured through the development of process metrics and implementation of key performance indicators".* (Pre-filed Evidence, W. E. Wells, pg. 19)

NLH's approach to optimizing corporate performance as described by Mr. Wells is consistent at a conceptual level with the Board's objective of ensuring NLH is operating in a manner that results in the *"most efficient production, transmission and distribution of power at the lowest possible cost."*

Mr. Wells explained that this is not a program that will end. He described the process as ongoing and one that will make *"...the Hydro of 2005... absolutely nothing like the Hydro of, say, 1999 or 1998."* (Transcript, Oct. 7, 2003, pg. 97/2-4)

In response to questions from the Panel, Mr. Brushett stated that *"In terms of Process Improvements Initiatives and so on, it would be common practice to outline what the objectives were and try to quantify that...and what the outcome should be at the end of the day".* He added that in undertaking such a large initiative it would certainly be expected that you would set out some objectives. (Transcript, Dec. 11, 2003, pg. 162/6-18)

During cross-examination by NP, Mr. Brushett stated:

> A. (Mr. Brushett) I think if you review some of the evidence, the pre-filed, as well as some of the examination of Hydro witnesses, there has been discussion about specific projects and how they translate into savings on a go-forward basis. However, there's also evidence suggesting how does this all tie together? What are you targeting for efficiency improvements? And where is that information in terms of your targets or your expected improvements, factored into this whole application and forecast?
> (Transcript, Dec.11, 2003, pgs. 92/19-25; 93/1-6)

In response to NP's question as to whether NLH should have some kind of overall plan, Mr. Brushett replied that, from a regulatory point of view the process is not transparent and NLH should be submitting targets which fall out of the overall plan. (Transcript, Dec. 11, 2003, pg. 97/8-16)

A large organization, such as NLH, would be expected to have a strategic plan with clearly defined goals and objectives, which is supported by a comprehensive business/operational plan. It is the Board's understanding, based on the evidence, that NLH has either completed or contemplated many of the elements that one would expect to see in a strategic/business planning process. These include reference to strategic considerations, KPIs, business improvement processes and accountable business units. The Board has not seen a comprehensive plan from NLH that clearly integrates the overall corporate goals and strategies and the various specific process improvement initiatives referenced during the hearing.

Order No. P. U. 7(2002-2003) stated:

> *"The Board believes the onus is on NLH to bring forward measures which clearly demonstrate the efficiency of its operations. This perspective was not presented into evidence before the Board in any of the normal business performance measures, either overall corporate performance, cost efficiencies or business unit accountability. There was also no indication that NLH had any of these performance measures/targets/objectives built into its existing business systems or was contemplating their implementation in relation to the strategic or business planning exercise currently underway."*

The linkage between sound planning and performance, more appropriately called accountability, is a key element in the regulatory oversight of the Board. This linkage remains a concern of the Board in this Application as it was previously. Now that suitable performance measures have been established and other strategic components are now in place within NLH, the Board feels the timing is appropriate to bring these pieces together into an appropriate regulatory accountability and reporting framework. The Board acknowledges that this process is substantial but should serve the interests of both NLH and the Board.

The Board will require NLH to incorporate the following KPIs into its annual reporting to the Board, commencing with its 2004 annual report.

i. Thermal conversion factor (MWh generated at Holyrood per barrel of oil-MWh/bbl);
ii. Hydraulic conversion factor (MWh generated per million cubic meters of water – MWh/MCM);
iii. Corporate operating, maintenance and administration expense (OM&A) per MWh generated;
iv. Generation OM&A per MWh generated;
v. Generation OM&A per MW installed capacity;
vi. Transmission OM&A per km of transmission line; and
vii. Distribution OM&A per km of distribution line.

The Board will direct NLH to propose to the Board for approval a *"peer group"* of utilities for the purposes of external benchmarking of its KPIs.

The Board will direct NLH to file by December 31, 2004 a report outlining:

i. a comprehensive description of NLH's strategic and business planning processes;
ii. a description of how corporate goals and strategies are communicated and operationalized, including how specific operational targets are identified and linked to corporate goals and strategies; and
iii. a description of how management performance and employee incentives are tied to achieving targeted goals, outcomes and efficiencies.

The Board will direct NLH to file annually, commencing with its 2004 annual financial report, a report outlining:

i. a strategic overview highlighting core strategies, corporate goals and achievements;
ii. appropriate historic, current and forecast comparisons of reliability, operating, financial and other key targeted outcomes/measures, including the KPIs as set out above; and
iii. initiatives targeting productivity or efficiency improvements, including the status of ongoing projects and improved performance resulting from completed projects.

2. Marginal Cost Study

The issue of the need for completion of a marginal cost study was raised by some of the parties to the hearing, both in the context of the discussion of the demand-energy wholesale rate and also with respect to demand side management and other rate design issues. This issue was also raised during NLH's 2001 general rate hearing. The Board determined at that time that it would not be timely to commence a marginal cost study given the many issues arising from that proceeding and also in light of the fact that the Electricity Policy Review was ongoing. In this proceeding the CA and NP have specifically recommended that NLH be required to complete a marginal cost study. The question of whether NLH should be required to undertake a marginal cost study was identified in the Mediation Report as one of the issues on which the parties disagreed. (Appendix H)

In final argument (pg. 32) the CA recommended that the Board direct NLH to undertake a marginal cost study and evaluate and make recommendations on how its rates can be re-designed to better incorporate marginal cost principles and promote market efficiency. The report should make specific recommendations regarding the introduction of rate options for customers and include a time bound plan for implementation. This recommendation is consistent with the CA's position during NLH's 2001 general rate hearing.

NP dealt with the issue of marginal costs in the context of the demand-energy wholesale rate, arguing that if such a rate is to be implemented long-run marginal cost information is required to properly design the rate. NP's position is summarized in its final argument (pg. E-42):

> *"A long-run marginal cost and retail rate design study is required to permit implementation of cost effective DSM and to evaluate the efficiency of retail rate designs. NP would review the results of the study to determine what action, if any, is required in the areas of rate design and DSM. NP 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. NP 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."*

In final argument (pg. 77) NLH stated that, if the Board sees merit in completing a marginal cost study, it is prepared to undertake the study to address long-term generation and transmission expansion and outline recommendations on resulting industrial and wholesale rate options. NLH stated that a second part of the study would need to be completed by NP which would incorporate the results of NLH's analysis of distribution costs which would then provide recommendations and result in retail rate options for NP's customers.

The Board has already determined that a marginal cost study is not necessary in order to implement a demand-energy wholesale rate for NP. The Board is satisfied, however, that NLH should undertake a marginal cost study. NLH has not undertaken a marginal cost study or a time differentiated embedded cost study since 1992. (NP-141) NLH's response to IC-185 indicates that consideration of rate options for the IC such as time-of-use and seasonal rates requires marginal cost information. NLH's response to NP-167 indicates that demand side management programs should be evaluated on a marginal cost basis with the constraint being revenue lost. In the Board's view a marginal cost study is also necessary to address some of the issues that were raised in this hearing, such as the value of the Interruptible B load, and NP's curtailable service option. In addition, as suggested by most of the COS experts, the results of the marginal cost study can be used to confirm the level of the demand rate for NP's wholesale demand-energy rate.

The Board recognizes that there must be an exchange of information between NLH and NP in order to successfully complete this study. It therefore expects that this study will take place in an open and co-operative manner. If problems are encountered that may delay the completion of the study, NLH is expected to seek further direction from the Board. Both utilities will be required by the Board as part of its general supervision of the utilities to provide quarterly updates as the study progresses.

The Board will direct NLH to undertake and file with the Board no later than June 30, 2006 a marginal cost study. NLH will be permitted to recover its reasonable costs associated with this study and may accumulate these costs in a deferral account to be dealt with at its next general rate application.

3. Future Supply/Integrated Resource Planning

Since NLH's 2001 general rate application three new sources of supply have been added to meet the forecast load requirements for Island Interconnected customers. These include the Granite Canal project and two power purchase contracts with Abitibi Consolidated Company of Canada relating to the Exploits River Hydro Partnership, and with Corner Brook Pulp and Paper Ltd. A wind generation project on the Burin Peninsula is also currently under development. These projects were exempted from the jurisdiction of the Board by government direction.

Mr. Wells acknowledged that, absent an exemption from government, the Board has jurisdiction with respect to new sources of supply. He stated:

> A. (Mr. Wells) Hydro is not the decision maker. We may make representations with respect to the new source of supply, but it's not Hydro's, in our authority. It's under the statutory authority to ensure that the island's energy--or the Province's provincial energy requirements are met are set out and it's the Public Utilities Board jurisdiction. They can decide and Government could, by Order in Council, decide, but not Hydro. It's not us to decide that it's going to be Island Pond or Granite Canal or anything else. It's not our decision.
>
> (Transcript, Oct. 9, 2003, pg. 160/14-23)

Mr. Wells' view is consistent with the provisions of the *EPCA* which sets out the Board's jurisdiction in relation to new sources of supply. Section 4 of the *EPCA* requires the Board to implement the power policy of the province as set out in Section 3 and includes the provision that:

> *"all sources and facilities for the production, transmission and distribution of power in the province should be managed and operated in a manner …(iii) that would result in power being delivered to consumers in the province at the lowest possible cost consistent with reliable service…"*

Section 6 of the *EPCA* further states that:

"(1) The public utilities board has the authority and the responsibility to ensure that adequate planning occurs for the future production, transmission and distribution of power in the province.

(2) The public utilities board may direct a producer or retailer to perform such activities and provide such information as it considers necessary for such planning to the public utilities board or to any other producer or retailer on such terms and conditions as it may prescribe."

It is clear that the authority and responsibility rests with the Board to ensure that adequate planning occurs for the future production, transmission and distribution of power in the province. In addition the *EPCA* mandates that supply options result in the lowest cost electricity consistent with reliable service. In planning for future supply, the Board has the discretion to take the appropriate steps to determine that, in planning for future supply, all available options are canvassed and that the options chosen result in least cost service. The Board must be satisfied that all reasonable and necessary steps have been taken to ensure that the Board can appropriately discharge its legislative mandate with respect to future supply.

According to the pre-filed evidence of Mr. Haynes (pg. 37, Table 8) there will be energy and capacity deficits in 2009 and in 2011 respectively. Mr. Haynes described the process that generally would be followed to evaluate the options for future supply and of making a proposal to the Board for review and approval of the most economic outcome that meets the reliability criteria that have been adopted. Mr. Haynes agreed that planning must start in 2005 to meet this forecast demand and that the options for future supply currently include Island Pond, any new generation sources that might result from the issuance of a Request for Proposals, or an additional unit at Holyrood, with the latter being the least likely at this time. (Transcript, Oct. 23, 2003, pgs. 171/23-25; 172/1-7; 173/18-25; 174/1-10)

It is not clear to the Board from the evidence as to what process NLH intends to follow in planning for future supply, which by its nature is a process which may take many years to complete. The Board notes that only one of the new sources of supply- Granite Canal - was addressed in NLH's near term planning document, <u>Generation Expansion Study of Near Term Options for Meeting Newfoundland's Load Growth, November 1999</u>. (CA-36) Time constraints have been a factor in the issuance of government exemption for new sources of supply in the past. Mr. Wells, in explaining why an Order-in-Council was issued to exempt Granite Canal from the jurisdiction of the Board, described the prospect which arose in 2001 for a smelter located on the Island relating to the Voisey's Bay Project. As a result of the delay caused by the consideration of this project, NLH had to quickly address the forecasted demand on the system. (Transcript, Oct. 10, 2003, pgs. 78/18-25; 79/8-25)

During the hearing a number of witnesses made reference to Integrated Resource Planning, its goals and some of its components. The IC recommended that NLH undertake a process of Integrated Resource Planning. (Written Argument, IC, pg. 45) Board Hearing Counsel submitted that system planning, long run marginal cost, and demand side management issues are best dealt with in the context of an Integrated Resource Plan. Mr. Brockman agreed that the views of stakeholders regarding supply side costs, demand side issues such as demand side management, including interruptible and curtailable rates, rate design and issues of fairness would be very important to this process. (Transcript, Nov. 18, 2003, pgs. 113-125) A marginal cost study was identified by both EES Consulting and by Mr. Brockman as being necessary for Integrated Resource Planning. (Transcript, Nov. 19, 2003, pg. 58/16-21; Supplementary Evidence, L. Brockman, Nov. 6, 2003, pg. 2)

The Board accepts that the implementation of Integrated Resource Planning may present sound opportunities for coordinated planning and improved regulation involving both utilities. The process brings together strategic planning, future supply and demand, least cost analysis, demand side management options and environmental considerations. While issues surrounding Integrated Resource Planning were raised in this proceeding, more detailed information is required before the Board can move forward with Integrated Resource Planning. It is also apparent that these issues cannot be effectively addressed in the context of a general rate application of one utility. The Board concludes that Integrated Resources Planning is a complex regulatory issue which should be considered in the context of a generic process involving both utilities and other interested parties. This process would allow the Board to address methodologies, benefits, costs and scheduled implementation associated with Integrated Resource Planning.

The Board has authority and responsibility to ensure that adequate planning occurs for the production, transmission and distribution of least cost reliable power in the Province. While the Board will make no order at this time with respect to Integrated Resource Planning, the utilities may be required by the Board, consistent with its mandate, to participate in a generic process to address issues and benefits associated with Integrated Resource Planning.

4. Demand Side Management/Conservation

Demand Side Management (DSM) is the term used to describe all activities or programs undertaken by an electric utility or by its customers to influence the timing and amount of electricity use, in an effort to shift demand to off-peak times, reduce peak, or reduce overall energy consumption. It may make use of more direct tools, such as water heater controls, or more indirect tools, such as rate design, and it is generally targeted at one or more of the following categories: (i) Conservation; (ii) Load Management; (iii) Fuel Substitution; (iv) Load Building; and (v) Self-Generation. (Pre-filed Evidence, L. Brockman, Exhibit LBB-4, pg. 1)

The benefits that can result from successful DSM programs include savings from fuel not burned at power plants in the short term, and resources saved from not building load serving facilities in the long term.

The issues of DSM and conservation have been raised in every public hearing involving NLH and NP going back to the energy crisis brought on by rapidly escalating fuel prices in the late 1970's. While both utilities have initiated conservation and DSM programs in specific communities and for limited time periods there has not been any coordinated, long-term approach to address the issues in a meaningful way.

As a result of the evidence presented in Order No. P. U. 7(2002-2003) the Board ordered NLH to file, with each application for approval of capital expenditures in rural isolated systems where generation is being replaced or upgraded, a cost benefit analysis of alternatives that might result in reduced load or deferral of capital expansions, including appropriate conservation or DSM programs. Since the issuance of Order P. U. 7(2002-2003) these cost benefit analyses have regularly been included with relevant applications.

NLH was also ordered to file, on or before December 31, 2002, a multi-year plan directed towards its community-based conservation initiatives. This report was received by the Board on December 12, 2002, and was filed in this hearing in response to CA-20. NLH's plan indicates that a professional consultant has been engaged to assist with the development of an appropriate program and promotional activities focused on encouraging customers *"to identify with and embrace the concepts of energy conservation"*. The multi-year plan is called Hydrowise, and its primary purpose is to identify opportunities for customers to manage their electricity bills by helping them understand electricity usage in their homes and businesses. The long-term goals of the program are to use continuous education and promotion and customized information to:

- modify attitudes and behavior;
- focus greater attention and interest on energy conservation; and
- provide a program that is recognizable and accessible and that will assist customers to enjoy a more comfortable living environment; and reduce their energy costs.

The program has a multi-year phase-in schedule and NLH intends to evaluate the plan by tracking various statistics on customer participation and by customers' ratings in the Annual Customer Satisfaction Survey.

In this hearing the issue of conservation and DSM was addressed during public presentations and in the context of discussions regarding the demand-energy rate for NP, the need for a marginal cost study, and the link between these and proper price signals that would influence the implementation of DSM programs.

The availability of new tools to assist consumers in making wise use of electricity was illustrated during public presentations on December 8, 2003 in a well-constructed presentation by Mr. Maurice Tuff and Mr. Danny Tuff of Blue Line Innovations Inc. In an effort to provide real time feedback to consumers Blue Line Innovations have developed a programmable power cost meter that can predict, based on current usage and the current rate, what the monthly bill will be. According to the presentation the meter is simple to install, is affordable in that it will retail for less than $100, and is currently the subject of an agreement with NP whereby it will be installed as a test unit in the homes of 100 of NP's customers. Mr. Maurice Tuff indicated that studies have been carried out on the use of the power cost meter and he feels confident that "*anyone who uses one of these will conserve over 10 percent."* (Transcript, Dec. 8, 2003, pgs. 23-24)

In final argument (pgs. 35-39) the CA expressed his disappointment with the Hydrowise program and with the lack of initiative shown by both utilities in this province. He asked that the Board direct NLH to embark upon a conservation program with specific targets and objectives.

He summarized the positions of several consumers who made presentations to the Board during the hearing regarding their interest in conservation, consumer education, rate design aimed at providing price signals to consumers, the activities of the Climate Control Plan for Canada, billing improvements to provide more detailed consumer information, and the role of the Board in promoting conservation. He did express approval of innovative technology such as the power cost meter developed by Blue Line Innovations Inc. and suggested that the Board should remain appraised of and support this initiative.

NP stated that DSM programs which result in higher rates over the long term should not be implemented. NP submitted that proving the existence of effective DSM programs is a complicated undertaking requiring the use of specific methods of evaluation. NP agreed with the direction in Order No. P. U. 19(2003), issued on completion of NP's 2003 general rate hearing, whereby the Board concluded that determining a policy direction on DSM is complex and is best dealt with in a generic hearing. (Brief of Argument, NP, pg. E-15)

Board Hearing Counsel stated that the principal objective of any DSM program is to ensure that resources are being used in the most efficient manner possible and that this requires knowledge of system planning and the long-run marginal cost of supplying energy and capacity. It was suggested that conservation and DSM are best addressed as part an integrated resource planning process.

In its final argument (pgs. 86-87) NLH submitted that specific targets regarding demand reductions are not appropriate with respect to the Hydrowise program, that its activities in the conservation area are appropriate, and that no further action is required at this time.

The Board reiterates the conclusion reached in Order No. P. U. 7(2002-2003) and Order No. P. U. 19(2003) that conservation and DSM initiatives are important issues with respect to least cost electricity for consumers in the Province. The Board previously noted the relationship between rates and electricity consumption and the impact of DSM and energy efficiency programs is complex, especially when considering the impact on future generation. The evidence presented during this hearing again illustrated problems that arise in determining what programs are cost-effective, provide material benefits to consumers and actually reduce or defer capital expansion over the long term. As concluded with reference to hearings into previous general rate applications of both NLH and NP, the Board was presented with insufficient evidence to enable it to provide specific and meaningful direction to the utilities in respect of DSM issues. For this reason, Order No. P. U. 19(2003) resulting from NP's latest general rate application stated:

> *"This matter would be most appropriately addressed in the context of a generic proceeding involving both utilities and interested parties. The Board will consider the manner and timing of such a proceeding following the hearing of NLH's general rate application."*

Following the completion of this hearing, the Board confirms this position and the Board will now consider the manner and timing of a generic proceeding on DSM. The Board also notes that DSM is an integral part of Integrated Resource Planning as outlined in Part II - Section X of this Decision and Order and the preliminary consideration of DSM may reasonably form a part of any proceeding into Integrated Resource Planning.

The Board encourages NLH to continue to raise consumer awareness and develop/implement programs aimed at energy efficiency and conservation. The Board will not direct NLH at this time respecting DSM initiatives but will consider the manner and timing of a generic proceeding which will address DSM options and impacts on the overall system.

5. Other Mediation Report Issues

The following agreed upon issues were also identified in the Mediation Report but have not been dealt with elsewhere in this Decision and Order:

> *"z. Hydro will work with the CA to redesign its rural customer survey to gather information on customer valuation of service quality versus the costs incurred to improve and maintain service quality, with the results to be reported to the Board in time for incorporation in Hydro's 2004 customer survey.*
>
> *cc. Parties request that the Board prepare or obtain a report on Performance Based Regulation (PBR) alternatives for Hydro and NP, with input solicited from all interested stakeholders prior to finalization of the Report, and opportunity for comment and discussion in considering the final Report."*

With respect to the issue of the redesign of NLH's rural customer survey the Board is not compelled to direct NLH on this matter. While the Board acknowledges the parties' efforts in the Mediation Process, it is difficult for the Board to accept a recommendation from the parties absent any other background information or other evidence to support it and to enable the Board to make an informed decision. While the Board will not order NLH to redesign its rural customer survey, it looks forward to any results flowing from this exercise should NLH proceed in the absence of a direction from the Board.

The Board also acknowledges the parties' request that the Board prepare or obtain a report on PBR alternatives for NLH and NP. The Board notes the parties' agreement and will consider the request as part of its ongoing regulatory mandate for both utilities.

XI. HEARING COSTS

Both the IC and the Towns of Labrador City and Wabush requested the Board award costs in their favour respecting their appearance at the hearing. Section 90(1) of the *Act,* states:

> *"90 (1) The costs of and incidental to a proceeding before the Board shall be in the discretion of the Board, and may be fixed at a definite amount, or may be taxed and the board may order by whom they are to be taxed and to whom they are to be allowed and the board may prescribe a scale under which costs shall be taxed."*

In support of its request for costs the IC referred the Board to the Supreme Court of Canada's 1986 decision in *Bell Canada v. Consumer's Association of Canada et al., [1986] 1 S.C.R. 190 (S.C.C.)* in which, the IC argued, the principle was established that costs will be available to intervenors who have participated in a responsible way and contributed to a tribunal's better understanding of the issues before it.

The IC also submitted that the Board's jurisdiction and discretion with respect to an award of costs is also supported by the decision of the Supreme Court of Newfoundland and Labrador, Court of Appeal in *Newfoundland and Labrador Hydro v. Newfoundland and Labrador Federation of Municipalities*(1979), 24 Nfld. & P.E.I.R. 317. In this case NLH challenged the Board's award of costs partly on the ground that the cost amount was excessive and partly on the ground that the costs should have been taxed on a party and party basis. The Court of Appeal ultimately found that the Board had the jurisdiction and discretion to make the cost award in question.

The Towns of Labrador City and Wabush submitted that the regulatory rate process is a complicated and expensive one requiring the input of people with specialized expertise. They argued that the process has credibility only if the affected parties are able to participate and present the necessary evidence.

NLH submitted that, until its 2001 general rate application and hearing, the Board had not awarded costs to intervenors such as the IC. At that time the Board fixed an amount for costs for the IC and stated that its decision was *"solely to recognize the circumstances surrounding this application"* and was not intended to set a precedent. [Order No. P. U. 7(2002-2003), pg.164] NLH submitted the IC have adequate financial resources to cover their own costs and that costs should not be awarded in their favour in this proceeding. NLH did not take a specific position on the matter of awarding costs to the Towns of Labrador City and Wabush.

NLH further requested, should the Board determine it is appropriate that costs be paid to the IC and the Towns of Labrador City and Wabush, an estimate of these costs should be included with the costs of the Board and the CA and amortized over a three year period to be recovered in rates.

The issues before the Board at this hearing include the appropriateness of NLH's forecast costs, the appropriate allocation of those costs, rate of return, capital structure, COS issues, and the resulting rates on the Island and in Labrador. Informed participation of the parties in these complex matters facilitates the proper discharge of the Board's obligation to ensure that the power policy of the Province is adhered to and that consumers are supplied power at the lowest possible cost consistent with reliable service.

The Board acknowledges that the proposed rate increases for the IC and the Towns are significant. In addition the proposals result in a fundamental change to the historic rate structure in Labrador West and Labrador East. The Board concludes that, in light of the significant impacts of the Application proposals on both the IC and the Towns, the full participation of both in this Application was important. Both the IC and the Towns participated in a responsible manner and have contributed to the Board's understanding of the issues through the calling and cross-examination of witnesses, and the tendering of written and oral argument. The Board concludes that an award of costs to both the IC and the Towns of Labrador City and Wabush is fair and appropriate in the circumstances.

The IC asked the Board to award taxed costs on a party and party basis. The Towns asked for their costs in relation to the intervention without specific reference to taxation. As set out above, Section 90 of the *Act* allows the Board to fix costs at a definite amount or to order that costs be taxed with the Board having discretion to prescribe a scale under which they are taxed. The Board has not prescribed a scale under which costs should be taxed and generally fixes an amount of costs rather than ordering taxation. This approach acknowledges the discretion of the Board as well as its expertise with respect to its proceedings which are by their nature technical and unique. The Board confirms that, in the absence of a scale under which costs in relation to hearings before the Board can be taxed, the Board is in the best position to exercise discretion as to the appropriate amount of costs. The Board will therefore require both the IC and the Towns to submit a detailed statement of their costs with supporting material for the consideration of the Board in the exercise of its discretion to fix an amount of costs.

The Board will make an award of costs to the IC and the Towns of Labrador City and Wabush. The Board will require the IC and the Towns of Labrador City and Wabush to file detailed statements of costs with the Board no later than May 28, 2004.

PART THREE. SUMMARY OF BOARD DECISIONS

I. CAPITAL STRUCTURE

Government Guarantee

1. The Board accepts that the Government guarantee plays a key role in supporting Newfoundland and Labrador Hydro's (NLH) ability to maintain a sound credit rating in the financial markets of the world and to access needed capital at reasonable rates.

Dividend/Capital Structure

2. The Board finds that a dividend policy of 25% of annual net income is most supportive of NLH's stated objective of moving toward a capital structure of 80/20 within a reasonable time frame. For purposes of determining the 2004 test year revenue requirement, NLH will be ordered to adjust the forecast dividend payment in 2004 to 25% of net income from the proposed 75% payout, incorporating the impact of this adjustment on the forecast return on equity and interest expense.

NLH as an Investor Owned Utility

3. The Board finds insufficient justification at this time to warrant treatment of NLH comparable to an investor owned utility for purposes of setting its financial targets. The onus is on NLH in future applications to clearly demonstrate through its operations and financial plans how it will achieve financial targets similar to an investor owned utility and what impacts this will have on its customers. The Board will continue to recognize NLH as a Crown owned utility afforded the benefit of a debt guarantee provided by its shareholder, Government, which sustains NLH's access to the capital markets.

Return on Equity

4. The Board concludes that an appropriate return on equity for NLH for the purposes of determining the weighted average cost of capital for the 2004 test year is 5.83%.

II. FOREASTING: PRODUCTION AND FUEL COSTS

Test Year Hydraulic Production

5. The Board accepts NLH's proposal to use the 30-year average for the estimation of hydraulic production for the 2004 test year, which will result in a total forecast hydraulic production of 4,582.15 GWh.

6. The Board will direct NLH to file its next general rate application using the full historic hydraulic data flow record with evidence demonstrating how the following outstanding issues have been addressed:
   i. correction of the internal inconsistencies in the data series; and
   ii. selection of an appropriate computer model for simulation.

Test Year Thermal Production

7. The Board accepts the 2004 test year forecast of thermal production of 1,780.61 GWh.

Holyrood No. 6 Fuel Conversion

8. The Board finds that a conversion factor for No. 6 fuel at Holyrood of 630 kWh/bbl is appropriate for the 2004 test year. This conversion factor will also be used in the Rate Stabilization Plan.

Fuel Price Forecasting

9. The Board accepts the 2004 test year forecasts for fuel prices as proposed by NLH in its October 31, 2003 revised filing for determining the 2004 test year fuel costs.

III. REVENUE REQUIREMENT

Depreciation

10. The Board accepts NLH's 2004 test year depreciation expense for the purposes of determining the 2004 test year revenue requirement subject to any adjustments arising from this Decision and Order, including:
    i. a reduction of 5.0% in the approved 2004 capital budget; and
    ii. an adjustment to the forecast 2004 capital retirements to 0.39% of its total capital assets.

Fuel Costs

11. The Board accepts NLH's current fuel purchasing policies and practices.

No. 6 Fuel

12. The Board will direct NLH to reflect a fuel conversion factor of 630 kWh/bbl for No. 6 fuel at Holyrood in its 2004 test year fuel costs.

Diesel Fuel

13. The Board accepts NLH's 2004 test year diesel fuel cost of $6,801,000.

Other Fuels

14. The Board accepts NLH's 2004 test year costs for other fuels of $757,000.

Purchased Power

15. The Board accepts NLH's 2004 test year purchased power expense of $33,594,000.

Salaries and Fringe Benefits

16. The Board will direct NLH to reduce its 2004 test year salary expense by $500,000 to reflect a higher vacancy allowance.

System Equipment Maintenance

17. The Board will require NLH's 10-year plan of maintenance expenditures for the Holyrood Generating Station to be updated annually to reflect changing operating circumstances.

18. The Board accepts NLH's 2004 test year system equipment maintenance expense of $17,440,000.

Transportation

19. The Board will direct NLH to reduce its 2004 test year transportation expense by $185,000.

Miscellaneous Expenses

20. The Board accepts NLH's 2004 test year miscellaneous expense of $4,185,000.

Other Cost Categories

21. The Board accepts NLH's 2004 test year expenses for travel, office supplies, insurance, equipment rentals and building rentals and maintenance, totalling $8,977,000.

22. The Board will allow an increase in the 2004 test year professional services expense of $200,000 to reflect the amortization over a three year period of additional regulatory costs.

Loss on Disposal of Capital Assets

23. The Board accepts NLH's 2004 test year expense of $1,266,000 for loss on disposal of capital assets.

Capitalized Expenses

24. The Board will direct NLH to increase its 2004 test year capitalized expense by $2,000,000.

Non-Regulated Operations and Inter-Company Charges

25. The Board accepts NLH's treatment of non-regulated expenses and inter-company charges in determining its 2004 test year revenue requirement.

26. The Board will direct NLH to file a report on the appropriateness of discontinuing the use of regulated equity in favour of book equity as part of its next general rate application.

Interest Expense

27. The Board accepts NLH's 2004 test year interest expense, subject to any adjustments arising from this Decision and Order.

Productivity Allowance

28. The Board will not impose a productivity allowance for NLH's 2004 test year revenue requirement in light of other decisions taken in this Decision and Order.

IV. RATE STABILIZATION PLAN

29. The Board will direct NLH to complete a review of the operation of the Rate Stabilization Plan for the period January 1, 2004 to December 31, 2005. A report on this review setting out an assessment of the impact on customers should be filed with the Board no later than June 30, 2006.

V. RATE BASE

Fixing and Determining Rate Base

30. The Board will fix and determine the 2002 rate base at $1,356,207,000.

31. The Board will require NLH to submit, as part of its next general rate application, a report with respect to the review of its property and assets setting out the acquisition date, the original cost, the purpose of the asset, the net book value and, where applicable, the load served.

Forecast Average Rate Base and Return on Rate Base

32 The Board will require NLH to file a revised calculation of rate base and rate of return on rate base for the 2004 test year which reflects the findings of the Board in this Decision and Order.

Range of Return on Rate Base and Excess Earnings Account

33. As part of its revised filing of rate base and rate of return on rate base NLH will be required to file for the Board's consideration a proposal for a range of return on rate base and a definition of an *"excess earnings"* account. This proposal should include an analysis of several alternate ranges along with the associated impacts.

Automatic Adjustment Formula

34. The Board will not implement an automatic adjustment mechanism for NLH's rates at this time. NLH will be required to submit a report containing a proposal for such a mechanism with analysis as to the impacts for consideration at its next general rate application.

VI. COST OF SERVICE

35. The Board accepts the proposed changes to the Cost of Service methodology with respect to the assignment of Hydro Place costs, NLH's municipal taxes and Board assessments, and with respect to the functionalization of general plant assets.

GNP Generation Assets

36. The Board accepts NLH's proposed assignment of the generation assets on the Great Northern Peninsula as common plant.

GNP Transmission Assets

37. The Board accepts NLH's proposed assignment of transmission assets on the Great Northern Peninsula to Hydro Rural.

Doyles-Port aux Basques Transmission Assets

38. The Board accepts NLH's proposed assignment of transmission assets on the Doyles-Port aux Basques system as specifically assigned to Newfoundland Power Inc. (NP).

Burin Peninsula Transmission Assets

39. The Board does not accept NLH's proposal to assign all costs associated with the Burin Peninsula transmission assets as common. The Board will direct NLH to separate costs for TL219 and TL212. Costs associated with TL219 will be specifically assigned to NP and costs associated with TL212 will be assigned common.

Treatment of NP Generation

40. The Board accepts NLH's treatment of NP's hydraulic and thermal generation in the Cost of Service study.

41. The Board will direct NLH to commission an independent study, to be filed with its next general rate application, of the treatment of NP's generation. This study should assess the value of NP's generation to the system and make recommendations on how the generation should be accounted for, both operationally and financially, in the Cost of Service study and rate design. NLH will be permitted to recover its reasonable costs associated with this study and may accumulate these costs in a deferral account to be dealt with at its next general rate application.

NP Demand Forecasts

42. The Board accepts the demand and energy forecasts for NP as proposed by NLH for use in the 2004 test year Cost of Service study.

VII. LABRADOR INTERCONNECTED SYSTEM

43. The Board finds that NLH's proposals for uniform rates for the Labrador Interconnected System are not unjustly discriminatory and rejects the complaint of the Towns of Labrador City and Wabush.

44. The Board accepts NLH's proposed five year plan to implement uniform rates for Labrador Interconnected customers as set out in its Application. The Board will direct NLH to file for approval a revised Schedule of Rates for each proposed rate change set out in the five year plan.

45. The Board accepts the proposal that NLH will adjust the Rural Rate Alteration Component of the Rate Stabilization Plan based on its projection of the five year phase-in of Labrador rates and the revenue credit available from secondary energy sales to CFB Goose Bay with the provision that it be applied only to the portion of the revenue credit applicable to NP and that the rates of the Labrador Interconnected customers not be negatively affected by this adjustment.

VIII. RURAL SYSTEMS

Rural Deficit

46. The Board will require NLH to submit, in conjunction with its annual financial report, an annual report on the rural deficit which should include the following:
    - i. the total rural deficit and a breakdown of its components by system (Island Interconnected Rural, Island and Labrador Isolated Rural, and L'Anse au Loup);
    - ii. a five year forecast of the rural deficit by system;
    - iii. the number of communities and customers served in each system;
    - iv. the cost per kWh per system, showing a comparison with cost per kWh for the Island Interconnected System (less rural) and the Labrador Interconnected System;
    - v. the deficit per customer and the cost recovery ratios for each system; and
    - vi. a summary of any specific initiatives undertaken to reduce the capital or operating costs in each system.

Lifeline Block for Rural Isolated Domestic Customers

47. The Board will direct the implementation a Seasonal Lifeline Block for NLH's Rural Isolated Domestic customers, both Island and Labrador, as set out below:

Seasonal Lifeline Block for NLH Diesel Systems		
Month	**Existing Lifeline (kWh)**	**Alternative Seasonal Lifeline Including Hot Water (kWh)**
January	700	1,000
February	700	1,000
March	700	900
April	700	900
May	700	800
June	700	800
July	700	700
August	700	700
September	700	700
October	700	800
November	700	900
December	700	1,000
Total kWh	**8,400**	**10,200**
Monthly Average kWh	**700**	**850**

48. Rural Isolated Domestic customers will continue to pay the same rate as NP's domestic customers for consumption within the Seasonal Lifeline Block. The existing block structure for these customers for energy consumption above the Seasonal Lifeline Block will be maintained. The existing policy of automatically adjusting the rates for consumption above the lifeline block by the average rate change approved by the Board for NP will continue to apply.

Preferential Rates

49. The Board accepts NLH's proposals for preferential rates for certain customers on the Island Interconnected and Isolated Systems as being in accordance with Government directives.

Rates for Isolated General Service Customers

50. The Board will approve NLH's proposal for the phase-in of a demand-energy rate structure, including the consolidation of rate classes and the elimination of the lifeline block, for general service customers on the isolated diesel systems over a three year period. The Board will direct NLH to file for approval a revised Schedule of Rates for each proposed rate change set out in the three year plan. Rates for these customers will continue to be adjusted by the average rate of change granted to NP in any general rate application.

Energy Tax Proposal

51. The Board will not recommend taxing legislation with respect to the recovery of the rural deficit, as proposed by the Towns of Labrador City and Wabush.

IX. RATES ISSUES/RATE DESIGN

Wholesale Demand-Energy Rate for NP

52. The Board finds that the introduction of a demand-energy rate by NLH for NP's purchased power is appropriate.

53. The Board will require NLH to file, no later than July 31, 2004, using the embedded Cost of Service for the 2004 test year adjusted for this Decision and Order, an application for the demand-energy rate to be implemented for NP on January 1, 2005. The application and supporting documents will fully address, among other things:

i. The degree of risk to be assumed by NLH;
ii. The expected relationship between the risk assumed by NLH and the response in terms of conservation efforts by NP;
i. An appropriate weather normalization mechanism, with quantification of the intrinsic error in the formula;
ii. The treatment of NP's generation as has been determined by this Decision and Order;
iii. Appropriate costing and billing determinants;
iv. The use of adequate metering, or, in its absence at any supply points, an appropriate estimation formula;
v. The effects of variations in NP's hydraulic generation and native load, individually and together; and
vi. The effects of varying levels of demand and energy rates for a range of usage patterns.

In the meantime, NLH will continue to charge NP an energy-only rate as proposed in its Application, revised to reflect the findings of the Board in this Decision and Order.

Interruptible *"B"* Contract for Abitibi Consolidated Company of Canada-Stephenville

54. The Board will not order NLH to reinstate the Interruptible B rate for Atibiti Consolidated Company of Canada-Stephenville or to make a similar rate available to the Industrial Customers.

Rules and Regulations for Service

55. The Board accepts NLH's proposed changes to the Rules and Regulations for Rural Customers.

Rate Change/Implementation

56. In order to finalize rates to be implemented as a result of this Decision and Order, NLH will be required to incorporate the decisions of the Board by:
    i. adjusting its revenue requirement and calculation of rate base and rate of return on rate base;
    ii. revising its October 31, 2003 Cost of Service study for the 2004 test year;
    iii. revising its proposed Schedule of Rates for the various customer classes based on the updated Cost of Service; and
    iv. addressing the consumption on which the rates will be effective for the bills of NP, the Industrial Customers, Labrador Interconnected firm customers, Island Interconnected Rural Customers and Isolated Rural Customers;

    and filing the above with the Board for approval.

X. OTHER ISSUES

Regulatory Oversight – Planning, Performance Measures and Reporting

57. The Board will require NLH to incorporate the following Key Performance Indicators (KPIs) into its annual reporting to the Board, commencing with its 2004 annual report.
    i. Thermal conversion factor (MWh generated at Holyrood per barrel of oil-MWh/bbl);
    ii. Hydraulic conversion factor (MWh generated per million cubic meters of water – MWh/MCM);
    iii. Corporate operating, maintenance and administration expense (OM&A) per MWh generated;
    iv. Generation OM&A per MWh generated;
    v. Generation OM&A per MW installed capacity;
    vi. Transmission OM&A per km of transmission line; and
    vii. Distribution OM&A per km of distribution line.

58. The Board will direct NLH to propose to the Board for approval a *"peer group"* of utilities for the purposes of external benchmarking of its KPIs.

59. The Board will direct NLH to file by December 31, 2004 a report outlining:
    i. a comprehensive description of NLH's strategic and business planning processes;
    ii. a description of how corporate goals and strategies are communicated and operationalized, including how specific operational targets are identified and linked to corporate goals and strategies; and
    iii. a description of how management performance and employee incentives are tied to achieving targeted goals, outcomes and efficiencies.

60. The Board will direct NLH to file annually, commencing with its 2004 annual financial report, a report outlining:
    i. a strategic overview highlighting core strategies, corporate goals and achievements;
    ii. appropriate historic, current and forecast comparisons of reliability, operating, financial and other key targeted outcomes/measures, including the KPIs as set out above; and
    iii. initiatives targeting productivity or efficiency improvements, including status of ongoing projects and improved performance resulting from completed projects.

Marginal Cost Study

61. The Board will direct NLH to undertake and file with the Board no later than June 30, 2006 a marginal cost study. NLH will be permitted to recover its reasonable costs associated with this study and may accumulate these costs in a deferral account to be dealt with at its next general rate application.

Future Supply/Integrated Resource Planning

62. The Board has authority and responsibility to ensure that adequate planning occurs for the production, transmission and distribution of least cost reliable power in the Province. While the Board will make no order at this time with respect to Integrated Resource Planning, the utilities may be required by the Board, consistent with its mandate, to participate in a generic process to address issues and benefits associated with Integrated Resource Planning.

Demand Side Management/Conservation

63. The Board encourages NLH to continue to raise consumer awareness and develop/implement programs aimed at energy efficiency and conservation. The Board will not direct NLH at this time respecting demand side management initiatives but will consider the manner and timing of a generic proceeding which will address demand side management options and impacts on the overall system.

XI. HEARING COSTS

64. The Board will make an award of costs to the Industrial Customers and the Towns of Labrador City and Wabush. The Board will require the Industrial Customers and the Towns of Labrador City and Wabush to file detailed statements of costs with the Board no later than May 28, 2004.

PART FOUR. THE ORDER

IT IS THEREFORE ORDERED THAT:

REVISED REVENUE REQUIREMENT AND COST OF SERVICE

1. **NLH shall file a revised total revenue requirement and cost of service study for the 2004 test year based on its October 31, 2003 filing, incorporating the determinations of the Board in this Decision and Order, including:**
   i. **The forecast dividend payout shall be reduced for rate setting purposes to 25% of net income;**
   ii. **The allowed rate of return on equity for the purposes of determining the weighted average cost of capital shall be 5.83%;**
   iii. **The fuel conversion factor for No. 6 fuel at Holyrood shall be 630 kWh/bbl;**
   iv. **The approved 2004 Capital Budget shall be adjusted for rate setting purposes to reflect a reduction of 5.0%;**
   v. **The forecast 2004 capital retirements shall be increased to 0.39% of total capital assets;**
   vi. **Salary expenses shall be reduced by $500,000;**
   vii. **Transportation expense shall be reduced by $185,000;**
   viii. **Professional services expense shall be increased by $200,000;**
   ix. **Capitalized expenses shall be increased by $2,000,000; and**
   x. **Costs associated with TL219 shall be specifically assigned to NP and costs associated with TL212 shall be assigned common.**

RATE BASE AND RETURN ON RATE BASE

2. **NLH shall file for the approval of the Board a revised calculation of rate base and rate of return on rate base for the 2004 test year based on the approach and methodology proposed in its Application, incorporating the determinations of the Board in this Decision and Order.**

3. **As part of its revised filing of rate base and rate of return on rate base NLH shall file for the approval of the Board:**
   i. **a proposal for a range of return on rate base including an analysis of several alternate ranges with impacts; and**
   ii. **a definition of an "excess earnings" account to be included in the company's system of accounts to which earnings above the maximum of the allowed range of rate of return on rate base will be credited.**

4. **The rate base for the year ending December 31, 2002 is hereby fixed and determined at $1,356,207,000.**

RATES, RULES AND REGULATIONS

5. NLH shall file for the approval of the Board a revised Schedule of Rates, Rules and Regulations to be effective as of July 1, 2004, addressing the consumption on which the rates will be effective, and incorporating the determinations of the Board in this Decision and Order, including:
   - **i. Rates charged to NP shall be on an energy-only basis.**
   - **ii. Rates charged to Rural Isolated Domestic customers for consumption of electricity:**
     (a) within the Seasonal Lifeline Block, as accepted by the Board in this Decision and Order, shall be the same rates charged to NP's domestic customers; and
     (b) above the Seasonal Lifeline Block shall continue as historically structured and determined.
   - **iii. The Rules shall include a statement of the policies for automatic changes in rates for all of NLH's rural customers whose rates and rate changes are tied to NP's rates and rate changes as and when approved by the Board.**

6. NLH shall file for the approval of the Board a revised Schedule of Rates no later than November 30 for each subsequent year for rate changes proposed in accordance with:
   - **i. The five-year implementation of uniform rates on the Labrador Interconnected System; and**
   - **ii. The three-year phase-in of a demand-energy rate structure for Rural Isolated General Service customers.**

7. The Complaint of the Towns of Labrador City and Wabush is dismissed.

8. The adjustment of the rural rate alteration component of the RSP based on the phase-in of Labrador rates and the revenue credit from secondary energy sales to CFB Goose Bay shall be applied only to the portion of the revenue credit applicable to NP and shall not negatively affect the rates of the Labrador Interconnected customers.

9. NLH shall file no later than July 31, 2004, based on the revised cost of service study for the 2004 test year, an application with supporting documentation as set out in this Decision and Order for a demand-energy rate to be implemented for NP as of January 1, 2005.

REPORTING

10. NLH shall file as part of its next general rate application;
   - **i. a report on the discontinuance of the use of regulated equity in favour of book equity;**
   - **ii. a report with respect to the review of its property and assets;**
   - **iii. a report setting out a proposal for an automatic adjustment mechanism with analysis as to impacts; and**

iv. an independent study of the treatment of NP's generation assessing the value of NP's generation to the system, with recommendations on how this generation should be accounted for in the cost of service study and rate design.

11. NLH shall file with the Board on or before June 30, 2006:
i. a report on the operation of the Rate Stabilization Plan for the period January 1, 2004 to December 31, 2005; and
ii. a system-wide marginal cost study.

12. NLH shall file a ten year plan of maintenance expenditures for the Holyrood generating station with its annual capital budget application, until otherwise directed by the Board.

13. NLH shall file with its annual financial report, commencing in 2004 until otherwise directed by the Board, an annual report on the rural deficit addressing the following:
i. the total rural deficit and a breakdown of its components by system (Island Interconnected Rural, Island and Labrador Isolated Rural, and L'Anse au Loup);
ii. a five year forecast of the rural deficit by system;
iii. the number of communities and customers served in each system;
iv. the cost per kWh per system, showing a comparison with cost per kWh for the Island Interconnected System (less rural) and the Labrador Interconnected System;
v. the deficit per customer and the cost recovery ratios for each system; and
vi. a summary of any specific initiatives undertaken to reduce the capital or operating costs in each system.

14. NLH shall file a report no later than December 31, 2004 proposing a *"peer group"* of utilities for the purposes of external benchmarking of its KPIs.

15. NLH shall file no later than December 31, 2004 a report outlining:
i. A comprehensive description of NLH's strategic and business planning processes;
ii. A description of how corporate goals and strategies are communicated and operationalized including how specific operational targets are identified and linked to corporate goals and strategies; and
iii. A description of how management performance and employee incentives are tied to achieving targeted goals, outcomes and efficiencies.

16. NLH shall file with its annual financial report, commencing in 2004 until otherwise directed by the Board, an annual report outlining:
i. A strategic overview highlighting core strategies, corporate goals and achievements;
ii. Appropriate historic, current and forecast comparisons of reliability, operating, financial and other key targeted outcomes/measures including the additional KPIs accepted in this Decision and Order; and

iii. Initiatives targeting productivity or efficiency improvements, including status of ongoing projects and improved performance resulting from completed projects.

OTHER ISSUES

17. NLH shall file its next general rate application using the full historic hydraulic data flow record with evidence as to how the following issues have been addressed;

i. Correction of the internal inconsistencies in the data series; and

ii. Selection of an appropriate computer model for simulation.

18. NLH may accumulate the costs associated with the marginal cost study and the independent study of the treatment of NP generation in a deferral account to be addressed at NLH's next general rate application.

HEARING COSTS

19. NLH shall pay the expenses of the Board arising from this Application, including the expenses of the Consumer Advocate incurred by the Board, pursuant to Section 117 of the *Act*.

20. The Industrial Customers shall submit a detailed statement of costs no later than May 28, 2004 for the consideration of the Board in making an award of costs to the Industrial Customers.

21. The Towns of Labrador City and Wabush shall submit a detailed statement of costs no later than May 28, 2004 for the consideration of the Board in making an award of costs to the Towns.

Dated at St. John's, Newfoundland and Labrador this 4th day of May 2004.

____
Robert Noseworthy,
Chair & Chief Executive Officer.

____
Darlene Whalen, P.Eng.,
Vice-Chair.

____
G. Fred Saunders,
Commissioner.

.

____
G. Cheryl Blundon,
Board Secretary.

Newfoundland & Labrador
BOARD OF COMMISSIONERS OF PUBLIC UTILITIES
120 TORBAY ROAD, ST. JOHN'S, NL

Website: www.pub.nf.ca **Telephone: 1-709-726-8600**
E-mail: ito@pub.nf.ca **Toll free: 1-866-782-0006**