

From: jchisamore@nlh.nl.ca
To: sgoudie@nlh.nl.ca; ddalley@nlh.nl.ca
Subject: Ed's Latest Evidence
Date: Wednesday, July 26, 2006 8:49:01 AM
Attachments: [...png](#)
[July 25-06 Martin Reviewed & TC Accepted.doc](#)

Please use this version for further edits and track your changes:



July 25-06 Martin Reviewed & TC Accepted.doc

***Edmund Martin
President and Chief Executive Officer
Newfoundland and Labrador Hydro***

At the hearing into Newfoundland and Labrador Hydro's 2006 General Rate Application, the Corporate Overview Evidence will be adopted by Edmund Martin, President and Chief Executive Officer of Newfoundland and Labrador Hydro.

A witness profile for Mr. Martin is as follows:

- Mr. Martin was appointed President and Chief Executive Officer of Newfoundland and Labrador Hydro and the Hydro Group of Companies in August of 2005.
- Mr. Martin has 25 years of experience in the oil and gas industry, most recently with Petro-Canada as Manager, Joint Ventures. He was a member of the East Coast senior leadership team with responsibility for managing Petro-Canada's interests in Hibernia, White Rose, Hebron, New Developments, shuttle tankers and the Newfoundland Transshipment Ltd. crude oil terminal. He was Petro-Canada's representative on the Hibernia Executive Committee, White Rose Management Committee, Hebron Management Committee, a Board member of Newfoundland Transshipment Limited and Chair of the joint oil company Regional Tanker Steering Committee.
- Prior to joining Petro-Canada, Mr. Martin was Chief Financial Officer and Lifting and Transportation Manager of Hibernia Management and Development Company.

- He is currently a Board member of the Canadian Electricity Association and the Energy Council of Canada. As well, he is a member of the Memorial University School of Business Advisory Board and the Institute for Ocean Technology Advisory Board.
- Mr. Martin graduated from Memorial University of Newfoundland (Bachelor of Commerce, 1980) and the University of Calgary (Master of Business Administration, 1988).

Corporate Overview

Evidence Outline

Page

1.	SUMMARY OF EVIDENCE	
2.	GUIDING PRINCIPLES	
2.1	Effective Rate Management	
2.2	System Reliability and Integrity	
2.3	Safety and Environment	
2.4	Financial Integrity	
3.	ECONOMIC OUTLOOK AND PROVINCIAL ELECTRICITY MARKET OVERVIEW	
3.1	Provincial Electricity Market	
4.	STRATEGIC PLAN AND FUTURE CORPORATE DIRECTION.....	
4.1	Corporate Reorganization	
4.2	Regulated Operations Division.....	
4.3	Engineering Services Division	
4.4	Finance Division.....	
4.5	Human Resources and Organizational Effectiveness	
4.6	Regulated/Non-Regulated.....	
4.7	Corporate Planning/Goals.....	
5.	OPERATIONAL EXCELLENCE.....	
5.1	Safety.....	
5.2	Customer Service.....	
5.3	Reliability and Capital Investment	

5.4	Cost Management.....
5.4.1	Workforce Management.....
5.4.2	Technological Investment
5.4.3	Supporting Cost Management through Balanced Asset Management.....
5.4.4	Conclusion
5.5	Other Cost Factors
5.5.1	Fuel
5.5.2	Electricity Sales
5.5.3	Power Purchases.....
5.5.4	Interest.....
5.5.5	Depreciation and Amortization
6.	ENERGY CONSERVATION AND OTHER ENERGY SOURCES
7.	FINANCIAL INTEGRITY AND CORPORATE STRUCTURE.....
7.1	Shareholder Relationship.....
7.2	Corporate Structure and Dividends
7.3	Rate of Return.....
8.	SUMMARY OF REVENUE REQUIREMENT

1. SUMMARY OF EVIDENCE

Newfoundland and Labrador Hydro (“Hydro” or “the Company”) has an established level of expertise and demonstrated ability to provide electrical consumers of Newfoundland and Labrador with safe, reliable electricity at least cost. As well, Hydro has been persistent in its overall cost management to ensure that costs over which Hydro has control are held to reasonable levels without compromising safety or appropriate levels of reliability.

Hydro is forecasting an average 8.2% increase to Island Industrial Customers, and 6.6% to Newfoundland Power (“NP”), which results in an approximate 4.6% increase to most end consumers.

Hydro is also forecasting an increase in costs to supply the Labrador Interconnected System which will result in an 8.5% average increase to customers. Diesel System Customers are forecast to receive an average XX% increase.

These increases are being driven by the following: fuel, operating and maintenance expenses, power purchases, interest, and depreciation.

Hydro has contained changes in its operating and maintenance costs at levels below inflation and maintained competitive rates in comparison with other jurisdictions. Hydro also provides a high level of reliability on its bulk transmission system and its generation assets, while minimizing the impact of rising costs on rates through continued operational improvements to gain efficiencies and cost savings on elements of the business which Hydro can effectively manage or control.

Hydro continues to look for cost savings where possible, through labour, technology and process improvements, as well as industry standard asset management practices. However, there are many costs over which Hydro has little or no control. Fuel costs, for example, have been volatile and escalating. In

1 situations such as these, Hydro looks to other means to manage those costs
2 such as the investigation of other generation alternatives, reducing fuel
3 consumption and maximizing efficiency. Hydro will also be increasing its activities
4 in the areas of energy conservation and efficiency initiatives for all electricity
5 consumers and has included additional resources and costs in 2007 to facilitate
6 this increased focus. The increased efforts in energy conservation will assist
7 consumers to manage their electricity costs.

8 Hydro has outlined concerns with the low rate of return on equity approved by the
9 Board of Commissioners of Public Utilities (the “Board”) in previous hearings and
10 the impact this return is having on the financial integrity of Hydro. While these
11 concerns still exist, Hydro is not proposing a change in the approved
12 methodology for determining its rate of return on equity at this hearing.

2. GUIDING PRINCIPLES

This section discusses the Guiding Principles Hydro followed in developing of this General Rate Application (“GRA”).

2.1 Effective Rate Management

There are many factors driving rates to consumers which are challenging, if not impossible, to manage. Over the past three years, consumer rate increases have been primarily driven by rising fuel costs. These costs have been essentially managed, and recovered from customers through the Rate Stabilization Plan (“RSP”). In assessing proposals to be brought before the Board during this hearing, Hydro thoughtfully examined the impact on consumers of the recommendations of the updated depreciation study which was filed in December 2005. These recommendations, when implemented, will impact significantly on rates. Hydro has provided the Board with an overview of this issue in Mr. Bradbury’s evidence and is asking the Board to accept the recommendations of that report while considering deferring their implementation.

2.2 System Reliability and Integrity

The projected 2007 costs were reviewed in the context of the impact on the provincial electrical system reliability and potential impact on consumers. Hydro’s asset management and maintenance are aimed at maximizing the value of that asset to the consumer. As assets age, an increasing expenditure in operating maintenance is required to ensure system reliability.

2.3 Safety and Environment

Safety is Hydro’s highest priority. Hydro’s leadership is committed to providing a safe environment for its employees and ensuring public safety.

All Hydro’s operational and financial management decisions are made with consideration to ensuring the safety and well being of its employees and the

1 public. Hydro also ensures that sound environmental management and
2 compliance with regulations is considered.

3 **2.4 Financial Integrity**

4 Hydro has established certain key financial targets designed to support its
5 financial integrity. An important target for Hydro is to attain a percentage of debt
6 in the regulated capital structure of 80%. Since reaching 84.9% in 2003, the
7 Company has made steady progress toward the 80% goal, and is predicting a
8 return to 82.9% by the end of 2007. This expected progress is the result of a
9 significant reduction in monies owed to the Company under the RSP, coupled
10 with a return to a stable and supportive dividend policy.

11 Hydro also employs risk management practices to ensure protection of the
12 Company's physical and financial assets. The risk management practices of the
13 Company are continually updated to reflect current trends in risk control. Hydro's
14 main business risks include major damage to critical assets, interruption of
15 service and liability to third parties arising from property damage, bodily injury or
16 death. To eliminate or mitigate such risks, the Company has developed regular
17 maintenance and inspection programs for all assets and completed loss analysis
18 of all incidents to develop loss prevention programs.

19 The preservation of Hydro's financial integrity helps ensure access to the capital
20 markets. Hydro's debt is viewed as "self-supporting" and hence supportive of the
21 Province's own credit rating. This indirectly helps lower the borrowing costs of the
22 Province and hence Hydro's own borrowing costs. In this manner, ongoing
23 support of Hydro's financial integrity helps lower the cost of capital to the benefit
24 of ratepayers.

3. ECONOMIC OUTLOOK AND PROVINCIAL ELECTRICITY MARKET OVERVIEW

The underlying trend for economic growth and electricity demand in the Province remains positive despite some weakness and restructuring in some of its traditional resource sectors. The economic performance of the oil sector has been notable and has helped lead the way for a sustained period of personal income growth. The potential for further resource developments in oil and gas, and Labrador hydro and mining, will factor prominently in the local economic environment that Hydro's operations serve to support.

As a capital-intensive company with a partial reliance on thermally based generation capacity, events in international markets have an impact at home. In particular, movements in world oil prices obviously have a direct impact on Hydro's costs. While Hydro generally assumes that current energy prices have peaked, they remain at high levels relative to history, and clearly have further upside risk potential in the face of world geo-political events. Interest rates are Hydro's other primary uncontrollable cost. With a well-established monetary policy aimed at stabilizing inflation, the Bank of Canada has increased the Bank of Canada short term borrowing rate nine times since 2004. This has had a direct impact on Hydro's overall cost of borrowing.

3.1 Provincial Electricity Market

Hydro's planning and financial performance is predicated on a number of market factors and economic assumptions, as they affect the electric power industry's operating environment. The general levels of economic activity in the Province, including the operating levels of locally based firms competing in international markets, directly affect Hydro's performance.

Since the late 1990's, the Province has recorded solid growth in GDP and employment with resource developments factoring prominently as sources of economic gain. Offshore oil production from Hibernia, Terra Nova and more

1 recently White Rose, and associated exports, has been the main driver of
2 provincial GDP growth. Also noteworthy during 2005, was that the Voisey's Bay
3 nickel development concluded major construction activities and commenced its
4 respective operations phase. Hydro normally adjusts provincial GDP for such
5 significant resource income when analyzing local economic growth and electricity
6 requirements. Notwithstanding, personal income growth has been sustained in
7 the Province in recent years. Such income growth, combined with low interest
8 rates, has resulted in consumer spending and housing demand remaining strong.
9 Moreover, electricity has remained the space heating energy of choice in the vast
10 majority of new residential and commercial construction. A related market factor
11 in recent years has been the relatively high petroleum product prices, since they
12 serve to increase electricity demand by further increasing the installation
13 preference for electric heat and encouraging the substitution of fuel oil heating
14 systems.

15 Looking forward across the next few years to Hydro's expected operating
16 environment, the outlook is reasonably positive. Labour stability is anticipated
17 across the public and private sectors. High energy prices are encouraging
18 offshore exploration and development options. Residential and non-resource
19 commercial investment remains strong. The Province's tourism industry
20 continues to show good growth. The importance of the fishery harvesting and
21 processing sectors continues for a great many rural areas of the Province but
22 there appears to be some broadening concern for the sustainability and/or
23 economic viability of the key crustacean fisheries. Ground fish stocks have yet to
24 commercially recover and landings remain at historically low levels. In addition,
25 the largest seafood company in the Province continues to struggle financially.
26 More favorable aspects of the fishery rest with aquaculture developments,
27 secondary processing operations and market niche development. Excluding
28 newsprint manufacturing, the Province's existing heavy industry base of oil
29 refining and iron ore mining and processing is enjoying strong market prices and
30 high operating levels and some material expansion in the iron ore industry is

- 1 possible. On the Island, a new base metal mine is under development and further
2 gold mining is expected.
- 3 The Provincial Government's financial position has improved tremendously owing
4 to favorable oil prices and a restructured Atlantic Accord. With a sustained high
5 oil price market environment, more stimulative fiscal and expenditure policies will
6 be possible. With an overall economic environment continuing to benefit from
7 reasonably low interest and inflation rates, the underlying local market conditions
8 for electric power operations suggest modest growth potential through the
9 medium (five to ten years) term.

1 **4. STRATEGIC PLAN AND FUTURE CORPORATE DIRECTION**

2 This section will provide an overview of the new corporate direction, expanded
3 mandate and resulting reorganization. This resulted in the consolidation of most
4 regulated activities within one division – Regulated Operations. This allows
5 Hydro to continue the appropriate level of accountability and performance
6 management.

7 As sole shareholder, the Government of Newfoundland and Labrador provided
8 Hydro with direction to become a broad-based energy company. In May 2006,
9 amendments to the Hydro Corporation Act and the Electrical Power Control Act,
10 1994 were passed, enabling Hydro to participate in other energy sectors.

11 The provision of a diversified range of energy services meant assembling a team
12 with experience and expertise in the electric utility business, as well as the oil
13 and gas sector. Hydro also reviewed its organizational structure and has made
14 changes that will provide for an efficient and adaptive energy company, while
15 maintaining a strong focus on our core regulated business.

16 **4.1 Corporate Reorganization**

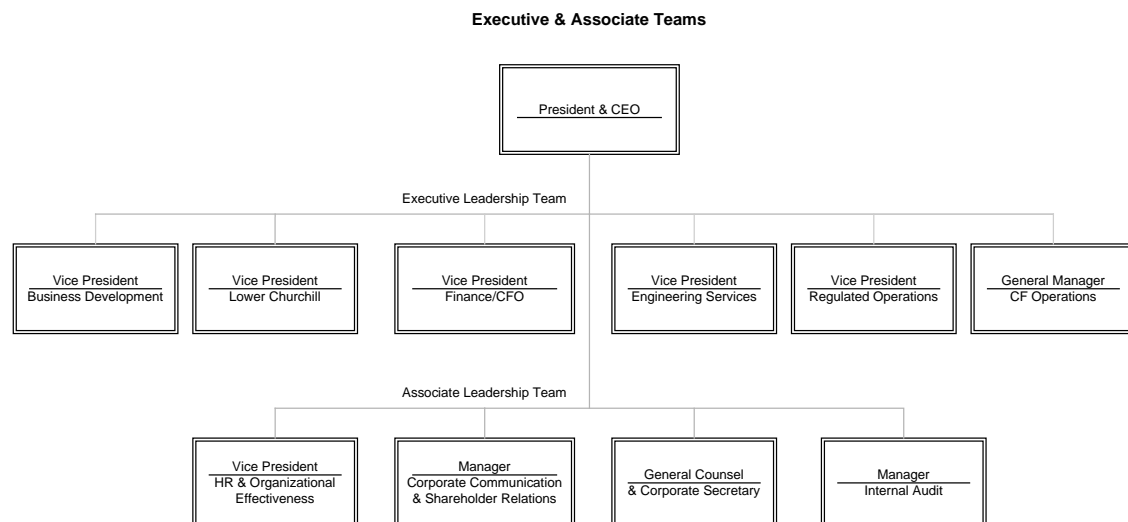
17 Hydro's core business continues to provide safe, least-cost, reliable power
18 across Newfoundland and Labrador. This business is regulated by the Board.

19 Hydro reorganized the Company to clearly define four key lines of business:
20 Regulated Operations; Churchill Falls Operations; Lower Churchill; and New
21 Business Development.

22 The reorganized structure facilitates increased emphasis on functional
23 excellence across all lines of business for corporate support areas such as
24 engineering, finance, and human resources and organizational effectiveness.

25 Along with the realignment of Hydro's organizational structure during the fall of
26 2005, a layer of senior management was removed from the Company. All

- 1 “Director” level positions were removed and responsibilities were redistributed
 2 across the management group increasing the span of control where possible. All
 3 Managers and Supervisors are receiving enhanced leadership training to
 4 facilitate the increased responsibilities as a result of the reorganization.
- 5 A new leadership team was put in place to achieve the new corporate mandate
 6 and ensure appropriate focus on our core businesses and new business
 7 opportunities.
- 8 The new Executive and Associate Leadership Teams are reflected below within
 9 the appropriate lines of business and support functions.



10

11

12 **4.2 Regulated Operations Division**

- 13 To ensure the efficient and effective operation of our core business, Hydro
 14 created a separate division, Regulated Operations. This division is responsible
 15 for the core elements responsible for providing power to consumers including
 16 generation, transmission, distribution, customer services and rural operations.
 17 There are several departments comprising the division: Hydro Generation,

1 Thermal Generation, System Operations and Customer Service, and three
2 Transmission and Rural Operations regions: Central, Northern and Labrador.
3 Regulated Operations is responsible for the operation and maintenance of:
4 • 9 hydroelectric generation stations;
5 • Holyrood Thermal Generating Station;
6 • 4 interconnected gas turbines;
7 • 3 interconnected diesel generating stations;
8 • 54 high voltage terminal stations;
9 • 25 lower voltage interconnected distribution substations;
10 • 3,742 km of interconnected high voltage transmission lines;
11 • 3,334 km of distribution lines; and
12 • 21 isolated diesel generating and distribution systems.
13 These assets serve 35,000 direct customers in 220 communities across rural
14 Newfoundland and Labrador, as well as five Island Industrial Customers and NP,
15 two Labrador Interconnected Industrial Customers and a Labrador
16 Interconnected secondary energy customer.
17 The division also provides metering, billing and ancillary customer services.
18 Employees working within Regulated Operations comprise essentially all field
19 staff of Hydro as well as system operations and customer service, located in St.
20 John's.

21 **4.3 Engineering Services Division**

22 This division provides comprehensive engineering services to Hydro and
23 includes the following specialized departments: Civil, Electrical, Mechanical,

1 Telecontrol, Protection and Control, Transmission and Distribution, and System
2 Planning. This group is responsible for both major operating and capital projects
3 from concept to final implementation.

4 **4.4 Finance Division**

5 As a result of the reorganization, three functions were added to the Finance
6 Division: Supply Chain Management, Information Systems and Corporate
7 Planning. These join Finance, Rates and Financial Planning, and Risk and
8 Insurance.

9 **4.5 Human Resources and Organizational Effectiveness**

10 This division was also reorganized and now includes Human Resources, Labour
11 Relations, Safety and Health, and Environmental Services.

12 Hydro also has a responsibility to protect the environment it operates in Hydro's
13 environmental performance is guided by its Environmental Management System,
14 which is ISO 14001 certified. This commits Hydro to three guiding principles:
15 prevention of pollution; continual improvement; and compliance with legislation.

16 **4.6 Regulated/Non-Regulated**

17 One of the principles considered when reorganizing Hydro was ensuring a clear
18 delineation between regulated and non-regulated activities to achieve
19 appropriate accountability and performance measurement. This principle guided
20 the creation of the Regulated Operations Division with clear responsibility for the
21 generation, transmission and distribution of power to customers, and the creation
22 of three separate divisions with clear accountability for unregulated lines of
23 business.

24 With respect to accounting for non-regulated activities, Hydro continues to
25 adhere to policies approved by the Board in Order No. P.U. 14 (2004). All
26 accounting processes and the corporate structure are being rigorously reviewed

1 to ensure, first and foremost, that they facilitate clear cost and performance
2 accountability to the Board, and secondly, support Hydro's expanded mandate.

3 Hydro will continue to ensure, as it has done in the past with other non-regulated
4 lines of business and activities, that regulated customers and their rates are not
5 impacted by activities related to the non-regulated businesses.

6 **4.7 Corporate Planning/Goals**

7 After a thorough planning process, Hydro will focus the business in eight key
8 areas to ensure Hydro provides enduring value to our customers, all consumers
9 of electricity, the shareholder and people of Newfoundland and Labrador. The
10 key areas are:

- 11 1. To be a safety leader;
- 12 2. To be an environmental leader;
- 13 3. To strengthen our financial and governance structure;
- 14 4. To grow a diversified and viable energy business;
- 15 5. Through operational excellence, to provide exceptional value to all
16 consumers of our energy;
- 17 6. To achieve sanction for the Lower Churchill Project;
- 18 7. To ensure a highly skilled and motivated team of employees who are
19 strongly committed to Hydro's success and future direction; and
- 20 8. To be a valued corporate citizen in Newfoundland and Labrador.

21 Establishing a framework and process for performance management is key to
22 achieving business strategy and goals. Effective performance management
23 identifies the key aspects of performance that need to be measured to assess
24 progress in accomplishing longer-term goals, as well as shorter-term objectives

- 1 and targets. Strong processes to track and communicate performance and seek
- 2 and implement improvements are also vital to managing corporate and
- 3 operational performance. Hydro uses a number of performance measures to
- 4 assess performance and drive strategies to support its goals - all of which will
- 5 provide greater value to the Company's customers.

5. OPERATIONAL EXCELLENCE

This section will provide an overview of Hydro's approach to operational excellence and customer service through cost management. It will also discuss external and often uncontrollable factors that influence rates.

5.1 Safety

The safety of employees and the public is a critical part of Hydro's operations and the Company is renewing its focus and investment in its safety program. Hydro will continue to provide customers with least-cost, reliable power and also ensure the safety and protection of our workers and the public.

With continuing system investment and upgrades, as well as repairs and maintenance, in often harsh weather conditions and physical environments, it is critical that crews have the right tools and equipment to do the job safely. For example, in 2005, Hydro invested in a heavy duty, off road track vehicle with a 100-foot boom for transmission line crews, permitting them to work in challenging weather conditions in remote locations. This equipment will allow them to work safely and permit effective repair and maintenance of the transmission system to provide customers with reliable service.

5.2 Customer Service

Hydro retails directly to 35,000 customers in approximately 220 communities in the more rural regions of Newfoundland and throughout Labrador. The Company's service areas represent a large geographical area with a challenging operating environment. Hydro has strived to continually improve its service and reliability, while managing costs attributed to the rural deficit. Overall, residential customer service satisfaction has been maintained at 93% from 2003 to 2005.

Hydro has worked diligently to provide its customers with levels of customer service comparable to other utilities. Customers expect professional, fast and flexible service. Hydro's Communications Centre installed an IVR (Interactive

Voice Response) System to assist customers in obtaining account information and during regular business hours, they have the option of transferring to a Customer Service Representative. The IVR system is available 24 hours a day, improving access, while also managing costs and labour requirements. Hydro handles 66,000 customer calls annually through the IVR allowing the Company to centralize customer service without additional staff.

5.3 Reliability and Capital Investment

Hydro, as the primary generator of electricity for the Province, has a responsibility to provide least-cost and reliable power. In addition to challenging operating conditions, many of Hydro's assets are reaching an age when significant investment is required to maintain operating reliability and meet customer expectations.

Hydro balances capital and operating investments to ensure appropriate reliability levels are maintained. Annually, Hydro invests significantly in the system and from 2001 to 2005, Hydro invested \$182 million in capital system upgrades and improvements. For example, in 2005 Hydro upgraded distribution systems throughout its service area, replaced the Energy Management System and upgraded the Distributed Control System at the Holyrood Thermal Generating Station.

System equipment maintenance expenses account for 20% of Hydro's operating costs and these costs can vary from year to year, largely as a result of maintenance costs at the Holyrood Thermal Generating Station. The realities of aging infrastructure, throughout the system, are the increased risks and costs associated with asset and operations management. In early 2006, Hydro faced a major extraordinary repair at the Holyrood facility as a result of a significant boiler tube failure which impacted customers and reliability performance.

1 **5.4 Cost Management**

2 The prudent management of costs, without compromising safety and appropriate
3 levels of reliability, is a principle carried throughout Hydro. Customers require a
4 reliable supply of energy but are also clear that they want electricity rates to
5 remain at reasonable levels. There are many factors affecting costs outside the
6 Company's direct control or influence. However, there are many costs, through
7 proven operations and business practices, which Hydro is able to manage
8 effectively for the benefit of the customer. This evidence will provide an overview
9 of our approaches to cost management which include the management of our
10 labour costs, making technological investment to reduce operations, labour or
11 maintenance costs, process changes resulting in savings, and asset
12 management approaches meant to minimize the impact of an aging asset base.

13 **5.4.1 Workforce Management**

14 Approximately 64% of Hydro's operating and maintenance costs for 2007 are
15 related to labour. Where possible, through attrition, operating and process
16 improvements, as well as technological investments, Hydro has reduced its
17 workforce by 53 full time equivalents since 2003. On an ongoing basis, Hydro
18 continues to evaluate its workforce against current business and operational
19 plans and make adjustments accordingly. At the same time, Hydro
20 acknowledges the importance of having a well-trained and motivated workforce
21 to ensure achievement of corporate goals. Hydro is also aware that there is an
22 appropriate baseline resource level considering the geographic and technical
23 complexity of its operations, and the safety of its workers and the public.

24 A key concern in this area for Hydro is the impact of an aging workforce and
25 Hydro's ability to recruit personnel for key positions, particularly in isolated areas.
26 Presently, the average age of the workforce is 47 and 209 employees will be
27 eligible for retirement over the next five years. Hydro employees have also been
28 subject to the provincial government's wage freeze. In addition, several key

1 trades are currently under-compensated when compared with other utilities in
2 Atlantic Canada including NP. Hydro's lineworkers, at present are paid \$3.19
3 less per hour than their counterparts NP. This has resulted in significant concern
4 within the present collective bargaining process and presents Hydro with a
5 considerable recruiting and retention challenge.

6 Hydro has also changed work practices to maximize productivity. At the
7 Holyrood Thermal Generating Station, the majority of employees have been
8 allocated a window of time for annual leave. This practice has resulted in more
9 efficient scheduling and execution of maintenance work resulting in increased
10 plant availability and fewer requirements for temporary resources.

11 Hydro continues to manage its labour expense through technological and
12 process improvements and balance this with rising labour costs expected from
13 salaries, wages and benefits to ensure recruitment and retention of employees.

14 **5.4.2 Technological Investment**

15 As with many companies, advances in technology to gain operational efficiencies
16 have allowed Hydro's customers to benefit from both a reliability and service
17 standpoint.

18 With a wide geographical area, operating remote facilities efficiently results in
19 savings to the consumer through operating efficiencies. Hydro, on principle, is
20 constantly looking for methods to incorporate remote operation into field
21 operations to improve reliability, while balancing costs and efficiency gains.

22 **5.4.3 Supporting Cost Management through Balanced Asset Management**

23 Like other utilities, Hydro is responsible for managing an aging asset base. Much
24 of the Province's electrical system infrastructure was constructed during the
25 electrification of Newfoundland and Labrador in the 1960's and is well over 40
26 years old. The challenge is to maximize the value of the asset for the customer,
27 while not jeopardizing reliability.

1 Hydro has invested in a wood pole reliability program which is targeted at
2 extending the life of its wood transmission poles for up to 10 years and will also
3 contribute to reliable service on the bulk transmission system. Hydro's approach
4 to capital investment is prudent and targeted at improving the level of service to
5 customers over the long term and minimizes costs and rate impacts.

6 At the Holyrood Thermal Generating Station Hydro, following best practice and in
7 consultation with suppliers, has adjusted the major maintenance cycles for
8 turbine overhauls, ensuring reliability while managing costs.

9 Where possible, Hydro has implemented maintenance programs designed to
10 extract full value to the consumers from all operating assets prior to consideration
11 of full replacement; however, continued investments are required to ensure all
12 consumers have a secure and reliable energy supply.

13 **5.4.4 Conclusion**

14 Overall, cost management is a key operating principle throughout Hydro. The
15 approach is founded on sound performance management and strategic planning
16 practices which guide Hydro in its operations.

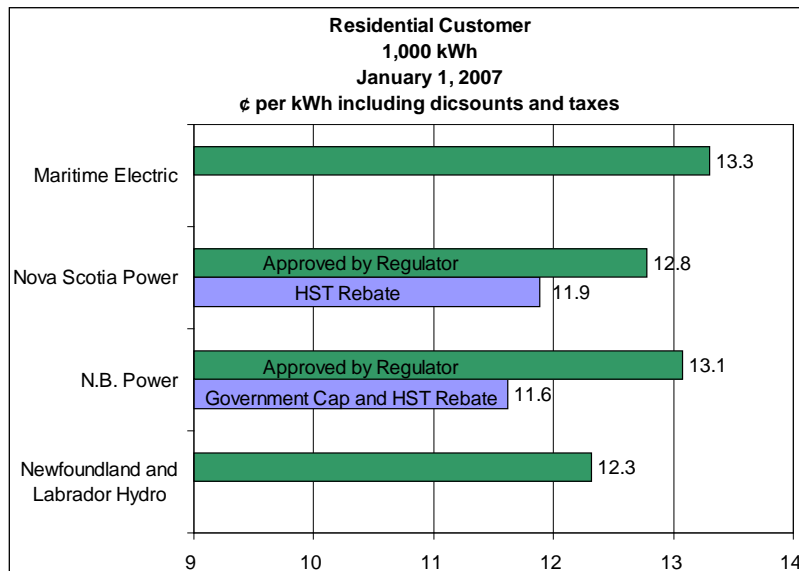
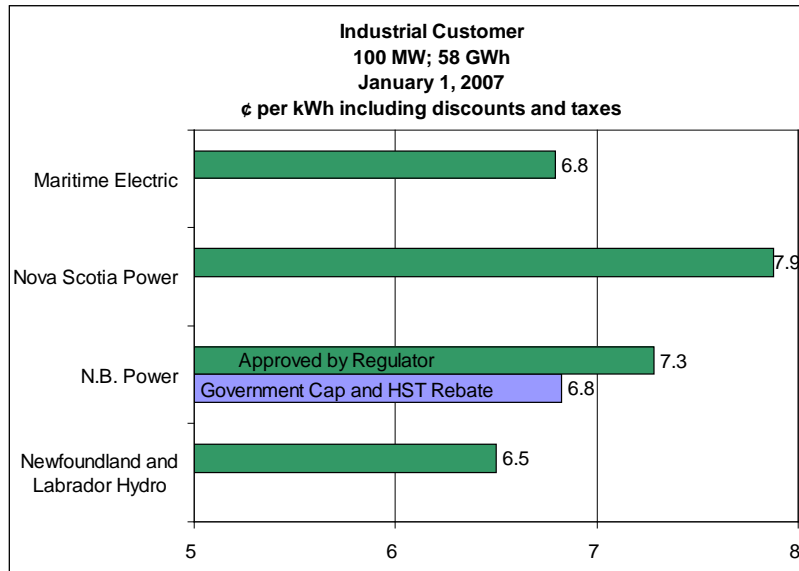
17 **5.5 Other Cost Factors**

18 **5.5.1 Fuel**

19 Many electricity consumers across North America are subject to rising energy
20 prices and the impact on electricity rates is clearly evident. Consumers on the
21 Island Interconnected System are reliant, in part, on electricity generated from
22 the oil-fired Holyrood Thermal Generating Station. Over the past five years the
23 thermal plant has supplied, on average, 29% of the Island Interconnected energy
24 requirements and is highly dependent on annual hydrology and varies from year
25 to year. Fluctuations in oil prices are managed for the consumer by the RSP;
26 however, the cost of No. 6 fuel is forecast to increase by 70% from the 2004 Test
27 Year to the 2007 Test Year. In contrast, operating and maintenance expense

1 have increased by only 8%, which despite economic and maintenance
 2 pressures, are tracking below inflation.

3 Provincial electricity rates continue to be reasonably competitive with other
 4 jurisdictions that are also facing economic pressures related to rising fuel costs.
 5 See the following charts for rate comparisons to Atlantic Canadian Jurisdictions.



21 Hydro's cost of serving isolated communities is also increasing due to the rising
 22 cost of diesel fuel.

1 The management of fuel costs within the context of volatile global markets is
2 challenging.

3 **5.5.2 Electricity Sales**

4 Compared to the 2004 Test Year, customer electricity requirements on the Island
5 Interconnected System in 2007 are forecast to decline by 270 GWh, for a
6 decrease of 4%. Industrial Customers requirements are expected to decline by
7 436 GWh and this reflects the shutdown of the Abitibi Consolidated Inc.
8 newsprint mill in Stephenville in the fall of 2005. In and of itself, this reduction in
9 industrial load results in a large fuel saving at the Holyrood generating plant.
10 Offsetting this decline somewhat is the ongoing load growth occurring in the
11 service territory of NP. In 2007, NP forecasts an additional requirement from
12 Hydro of 191 GWh relative to the 2004 Test Year. Hydro is also expecting Aur
13 Resources to be fully operational commencing in 2007 and this will add over 60
14 GWh annually to Hydro's electricity requirements. While there remains some
15 sales risks for the Island's newsprint sector, load growth for NP for their 2005-
16 2011 forecast period is presently projected at 1.2% per year.

17 In Labrador, customer electricity requirements in 2007 relative to the 2004 Test
18 Year are forecast to be 51 GWh higher for an increase of 5%. This reflects
19 generally stable rural loads in Labrador East and West coupled with higher sales
20 to the iron ore industry in support of higher production levels.

21 For the isolated systems, the net electricity requirements for Labrador systems
22 (excluding Natuashish) are projected to be unchanged in 2007 relative to the
23 2004 Test Year. Cutbacks in some fish plant operations offset what is generally
24 an underlying positive load growth trend for most Labrador diesel communities.
25 In 2007 Hydro assumes that electricity services provided in Natuashish will form
26 part of its isolated operations. The Island Isolated systems' requirements in 2007
27 are projected to be 18% lower than in the 2004 Test Year. This reflects the

1 recent interconnection of Rencontre East, cutbacks in fish plant operations and
2 the continuing declining load trend for most isolated Island systems.

3 **5.5.3 Power Purchases**

4 Hydro has power purchase agreements with four non-utility generators ("NUGS")
5 on the Island Interconnected System. In 2005, NUGS provided 411 GWh (5%) of
6 energy to the Island Interconnected System. These long-term contracts are an
7 important part of meeting provincial energy requirements. Contract prices are
8 tied to an inflation index and for one supplier, to fuel prices.

9 Costs for power purchases for isolated systems will have more than doubled
10 from 2004 to 2007 and are a significant contributor to the overall rising costs.

11 **5.5.4 Interest**

12 Interest costs are forecast to comprise nearly 25% of Hydro's total expenses in
13 2007 and hence are a significant component of Hydro's cost structure. Short-term
14 borrowing rates have increased significantly since 2004. Forecasts from Hydro's
15 financial advisors indicate that Government of Canada treasury bills will be 4.0%
16 by the end of 2007. This is significantly above the level at the beginning of 2004
17 of 2.5%. The Company manages its exposure to interest rates through ongoing
18 benchmarking against key indices, coupled with sensitivity analysis to assess risk
19 exposure.

20 **5.5.5 Depreciation and Amortization**

21 Hydro has continued to invest in the electrical system, to ensure an appropriate
22 level of reliability balanced against customer expectations and costs. Increases
23 in depreciation expense (approximately \$5 million) are driven by additions and
24 improvements to capital plant that have been necessary to ensure that
25 customers will be delivered reliable power at an appropriate cost over the longer
26 term. Over the past five years, Hydro has invested over \$182 million in the
27 system.

1 **6. ENERGY CONSERVATION AND OTHER ENERGY SOURCES**

2 Energy conservation initiatives are generally focused around educating
3 consumers on the efficient use of electricity and changing consumers' use of
4 electricity, thereby reducing demand or energy consumption.

5 On the Island Interconnected System, it is hoped that conservation will also
6 support Hydro's long-term goal to offset fuel usage and resulting costs at the
7 Holyrood Thermal Generating Station. Combined with the use of alternative
8 generation sources and future hydro developments, energy conservation
9 programs can potentially reduce the need for thermal generation and potentially
10 delay future additional thermal energy sources, benefiting consumers even
11 further.

12 Energy conservation and demand side management efforts have proven to be
13 beneficial in offsetting fuel costs in isolated diesel systems. Hydro distributed
14 compact florescent lights to customers in these communities. With a
15 participation rate approaching 90%, the Company's annual savings are estimated
16 at approximately 1,000,000 kWh per year, with an associated fuel saving of
17 300,000 litres per year. At current diesel prices, this represents savings
18 exceeding \$200,000 per year.

19 Ultimately, the outcome of conservation efforts will be focused on lowering the
20 long-term cost and environmental impact of the province's electricity system
21 through changes in consumers' energy usage habits.

22 To mitigate the challenge of rising fuel costs, along with increased conservation
23 efforts, Hydro is advancing the assessment of potential generation from
24 additional hydroelectric stations on the Island. The Company is also assessing
25 the potential integration of wind power on the Island Interconnected System
26 through a competitive Request For Proposals process for 25 MW of wind power.

1 **7. FINANCIAL INTEGRITY AND CAPITAL STRUCTURE**

2 This section will review the nature of the capital structure of Hydro and the
3 relationship with the shareholder including previous concerns expressed by the
4 Board around dividend policy and practices. There is also some discussion
5 about the financial limitations on Hydro as a result of the low rate of return
6 approved by the Board.

7 **7.1 Shareholder Relationship**

8 Hydro is solely owned by the Government of Newfoundland and Labrador.
9 Hydro is embarking on a governance review expected to solidify a more formal
10 and commercial relationship with its shareholder to facilitate Hydro's expanded
11 mandate.

12 **7.2 Capital Structure and Dividends**

13 Hydro, in consultation with its Board of Directors, has secured a commitment
14 from its shareholder to suspend dividends and reinvest all non-regulated and
15 regulated earnings in Hydro over the current government fiscal year 2006/2007.
16 This will result in an improved overall capital structure.

17 For the regulated business, it will assist in the movement of the debt to capital
18 ratio from 86% to a targeted 80% as per the Board's recommendation in Order
19 No. P.U. 14 (2004). By the end of 2007, the debt to capital ratio t is expected to
20 improve to 83%.

21 **7.3 Rate of Return**

22 The present rate of return on equity for Hydro as set by this Board in Order No.
23 P.U. 14 (2004) is 5.83%. Hydro is not seeking an increase in its return on equity
24 in this Application. The return on equity component of Hydro's proposed rates in
25 the present Application has been calculated on a basis that is consistent with the
26 method ordered by this Board in Hydro's last GRA, Order No. P.U. 17 (2004).

- 1 Under that method, which sets Hydro's return on equity at Hydro's marginal cost
2 of long-term borrowing, the rate of return on equity being proposed in this
3 Application is 5.21%.
- 4 Hydro acknowledges the findings of the Board in Order No. P.U. 17 (2004) that
5 there were a number of issues to be resolved before it would be appropriate to
6 permit a rate of return for Hydro comparable to the rate of return of an investor-
7 owned utility. According to credit rating agencies, the current rate of return is low
8 when compared to investor owned utilities and many crown-owned utilities.
9 Hydro believes there continue to be inherent risks of a low rate of return on
10 Hydro's financial integrity.

1 **8. SUMMARY OF REVENUE REQUIREMENT**

2 Hydro's total proposed revenue requirement for 2007 is \$443.4 million, an
3 increase of \$84.2 million over the 2004 Test Year. Approximately \$64.4 million of
4 this increase is fuel related. Fuel expense for the Holyrood Thermal Generating
5 Station accounts for \$58.8 million of the increase. This change is directly
6 attributable to increases in the price of fuel and most of this cost is already
7 reflected in rates through the operation of the RSP. Diesel costs, which are a
8 significant component of Hydro's cost of providing electricity to its customers
9 served on isolated systems, increased by 5.6 million. Power purchase costs
10 increased by \$4.8 million, largely attributable to purchase prices which are linked
11 to Hydro's avoided cost of fuel. The remaining increase is due to increases in
12 operating costs (\$6.9 million), depreciation (\$5.1 million) and interest (\$3.5
13 million), offset by a decrease in margin (\$0.5 million).