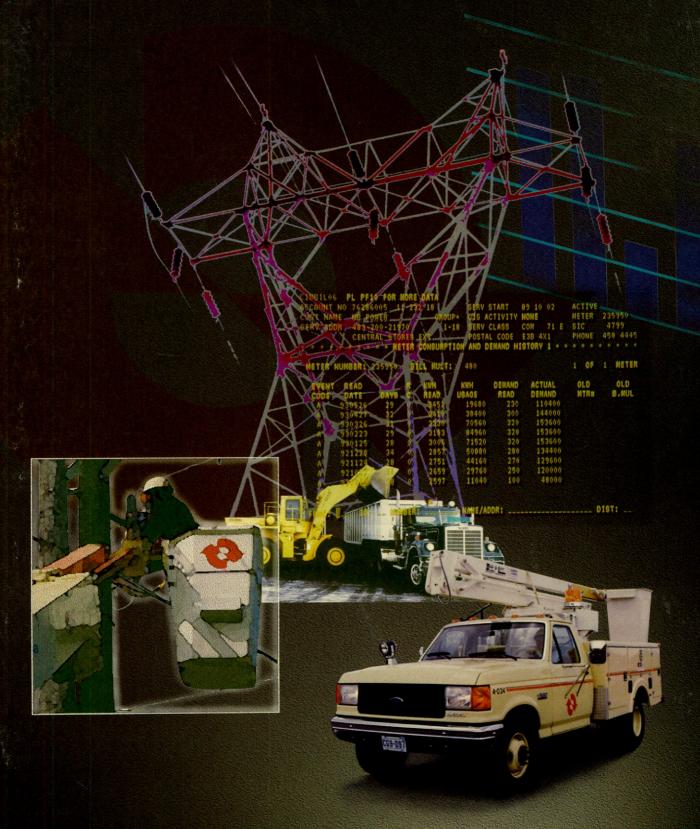
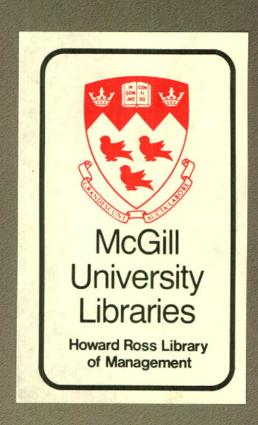
## **New Brunswick Power Corporation**

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Annual Report



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System Map (inside back cover)

### Highlights

- CEA survey names NB Power as number one in Canada for customer satisfaction
- 5% rate increase approved
- Revenues decline due to exports
- Net income declines to \$1.1 million

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Annual Reports 
McGILL UNIVERSITY

June 28, 1993

To His Honour

The Honourable Gilbert Finn

Lieutenant-Governor of New Brunswick

Sir:

The New Brunswick Power Corporation begs leave to submit, in accordance with the Electric Power Act, Chapter E-5, of the revised Statutes of New Brunswick 1973 as amended, the following report for the twelve-month period ended 31 March 1993.

I am, Your Honour,

Yours very truly

J. Raymond Frenette

Chairman

New Brunswick Power Corporation

### **Comments**

In last year's annual report we spoke of the business challenges of the 1990s and how NB Power must respond by becoming increasingly efficient and cost effective. Our message this year is that we are making good progress and remain fully committed to this course of action.

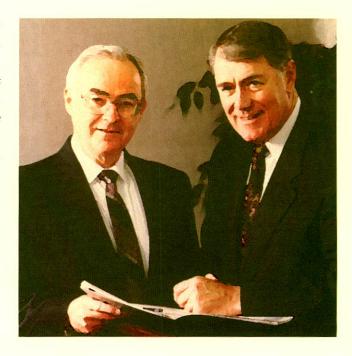
1992-93 was a difficult year financially. We began the year with no rate increase. We were very aware of the weak North American economy and the impact on our customers and wanted to delay a rate increase as long as possible.

As the year unfolded, several undesirable trends developed. Revenue growth in the province was slower than expected. The weakening Canadian dollar increased foreign exchange costs. Oil prices were trending upward.

We responded initially by identifying and implementing further expenditure reductions of \$15.2 million from planned levels. Our objective of reducing staffing levels by 5%, as outlined in last year's report, was expanded to include an additional 100 regular positions per year for three years. We have since increased this target by a further 100 positions. Total reductions will now be approximately 529 positions, which equates to about 18%.

Even with the expenditure restraint, it was necessary to implement a 5% average rate increase on October 1, 1992. This increase was subsequently confirmed by the Board of Commissioners of Public Utilities. A larger increase could probably have been justified, as is apparent from the final net income level of \$1.1 million, but we again were trying to keep rate increases down due to the weak economy.

New Brunswick
Power Corporation
President and CEO,
G. Linwood Titus
(left) and Chairman,
J. Raymond Frenette
at corporate head
office in Fredericton



A primary focus of our cost containment programs is what we spend on labour, materials, hired services and related expenses. On our Statement of Income, these costs are categorized under the line "Operations, maintenance and administration".

Our reference point has been 1990-91, when our operations, maintenance and administration costs were \$266.3 million. While these costs rose to \$270.1 million and \$273.5 million respectively in 1991-92 and 1992-93, there were a series of unusual, non-recurring charges in each of those two years which prevented total spending from falling below the \$266.3 million target. For example, in 1992-93 we noted as an expense \$5.0 million for the estimated present value of all future costs of an early retirement program. Our costs were \$5.5 million higher because of a longer than normal planned maintenance outage at Point Lepreau. We also wroteoff \$2.5 million in respect of a claim by the Sprayers of Dioxin Association which has been settled, and \$2.0 million for the anticipated cost of incinerating PCB-contaminated oils and equipment. Adjusting for these non-recurring charges, we have actually reduced our spending level below that of 1990-91.

As we move forward into 1993-94 we face further challenges.

The first 443 MW coal-fired unit at Belledune is in the final stages of commissioning and should soon be brought into service. The project, initially budgeted for completion in September 1993, had been tracking ahead of schedule until an electrical fault and fire destroyed the station's unit transformer on June 25. A temporary transformer is expected to be brought to the site to allow commissioning to proceed while a permanent replacement transformer is built. We currently expect an early fall in-service date. The capital cost of the first unit will rise beyond the target level of \$965 million which had been associated with a July inservice date.

Despite the transformer set-back, we consider the Belledune construction program to have been a huge success.

Our project team, made up of our staff and local and national Canadian consultants, used the latest management approaches and construction techniques. The local labour force was highly productive and functioned most efficiently under a project agreement. Suppliers from seven countries brought the best available equipment and technologies to the site. Initial coal supplies have been contracted from South America and the U.S. at prices as much as 40% lower than we had expected.

As with any major new capital intensive project, absorbing the financial charges of Belledune into the Corporation's rate structure will require rate increases despite our cost containment efforts. We are currently considering ways to phase in the financial charges to smooth out the rate increase requirements over several years.

While this annual report has a central theme of cost containment, we have certainly not lost sight of our customers, our employees and our commitment to the environment. We hope that this report provides the reader with some insight into the programs we have undertaken to better serve each of our key constituencies.

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### The Year Under Review

### KEEPING RATES AS LOW AS POSSIBLE

One of the best litmus tests for an electric utility is reasonable rates. Despite the fact that we were making headway in reducing costs to 1990-91 levels, in October 1992, faced with reduced revenue growth as a result of the sluggish economy, higher prices for oil and an unexpected increase in foreign exchange costs, the corporation had no alternative but to raise its rates. Because of the economic hardship caused by the recession, we kept the increase as low as we could, raising rates by an average 5%. Even with this rate increase, New Brunswick residents pay the lowest rates for electricity in Atlantic Canada and the fourth lowest rates in Canada. Our rates for business and small and large industrial customers are lower than those in Ontario and the New England states. In the last seven years, rates in New Brunswick have increased by 9.6% compared to an average

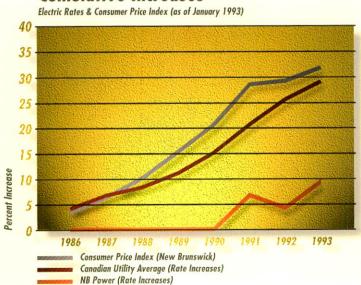
Canadian electric utility rate increase of 29.2%, and to the 31.9% increase in the consumer price index in New Brunswick.

### A New RATIONAL STRUCTURE FOR THE 1990s

With the cost containment measures came the impetus for a leaner corporate structure more responsive to the needs of a company in a postconstruction cycle.

A freeze on hiring, filling vacant positions only when absolutely necessary and using existing staff more effectively are all part of a downsizing program intended to reduce regular staff by 529 positions by March 1995. During 1991-92 employment levels had peaked at 2874 with 2950 regular staff positions planned for 1992-93. The latter number included staffing for the Belledune generating station, new technical operations positions at Point Lepreau and approximately 30 vacant positions elsewhere in the Corporation. In late 1991-92, however, as part of our cost containment measures, we cut back on our planned staff levels. Through normal attrition and two early retirement programs that took effect March 1992 and March 1993, we reduced staff levels by 229 positions. As of March 31, 1993 we had 2700 regular staff working for NB Power. By employing more proactive measures, instead of relying on normal rates of attrition which are not producing the desired reductions, we plan to reduce staff levels by a further 200 during the 1993-94 fiscal year and an additional 100 in 1994-95.

#### **Cumulative Increases**



#### THE THREE R'S

As a prelude to a tighter, more efficient corporation, a sweeping plan to renovate, redeploy and redevelop computing capabilities within the company is now underway. For example, customer billing systems are being reviewed and replaced by a new system that will improve customer service by putting more of the ability to satisfy a customer's request into the hands of the person first speaking with the customer. Three separate timekeeping processes (for employees, vehicles and consultants) will be combined into one which will save time and eliminate redundancies. The benefits will mean increased productivity and increased accountability.

### Belledune Construction Winds Down . . .

1992-93 was the last full year of construction on the Belledune coal-fired generating station. During the three year construction phase, 115 major construction contracts were let worth \$635 million. Suppliers from seven countries brought the best available equipment and technologies to the site. The workforce peaked at 2269 in summer 1992. Many construction milestones were met during this last year including first fire in the boiler, the arrival of the 13-storey high continuous ship unloader by sea from Finland, and the completion of 3.5 km of coal conveyors and a 120 000 tonne coal storage dome large enough to house a baseball field.

The station is now being commissioned prior to coming into service. By the end of the fiscal year it appeared as if we would be bringing Belledune on the system grid several months ahead of schedule; during commissioning, however, the unit transformer at the plant was seriously damaged by an electrical fault and fire and has to be replaced. Belledune will now be coming into service on the original schedule of autumn 1993.

### . . . AND THE STATION IS LINKED TO THE GRID

Construction of the new 345 kV transmission line from Salisbury to Bathurst along with associated terminals, substations and transformers, was completed in December 1992 with the spur line connecting the Belledune generating station to the NB Power grid commissioned in May 1993. This new transmission upgrade completes the 345 kV "ring" around the province, increasing the reliability of the system in the Moncton and Bathurst areas and reducing transmission losses by 25 MW.

In summer 1992, the NB Power provincial microwave telecommunications network was expanded to provide the additional facilities required to serve the 345 kV transmission upgrade. This telecommunications network provides a reliable communications path for transmission system protective relaying and control signals, metering and operational voice channels.

The work completed during summer 1992 included a new section between Newcastle and Memramcook (this closed the loop on the NB Power provincial microwave system whose first link went into service in 1974) and recommissioning the Bathurst to Eel River section in order to accomodate the Belledune generating station. At Belledune, the use of fibre optic cables over the short distance between the station and its associated 345 kV and 138 kV switchyards marked the first use of this communications technology by NB Power on its transmission system.



### REDUCED DEPENDENCE ON OIL

At the Dalhousie generating station, work is underway on converting the boilers from burning oil and coal to Orimulsion™ and on building a scrubber to remove sulphur dioxide gases. Activity on the site over the past year has consisted of erecting the structural steel for the scrubber building and for the new administration building, erecting the scrubber itself and building a waste water treatment plant.

The Belledune and Dalhousie energy projects are part of an off-oil development plan that will mean somewhat higher rates to our customers in the short term but rates in the longer term will be lower and more stable and the power supply will be more secure. By 1995-1996, when both the Belledune and Dalhousie projects will be completed, our dependence on foreign oil for in-province loads will be less than 16% compared with 30.7% in 1989-90. The addition of these two units will add some \$1.3 billion dollars to capital costs. Both stations will come into service with the most technologically advanced flue gas desulphurization systems - Belledune's will be the first utility scrubber in Canada and Dalhousie's the third - which will greatly reduce sulphur dioxide emission rates.

# ENERGY CONTROL THE FOUNDATION FOR AN EFFICIENT SYSTEM

Last year, the operating capability of the Energy Control Centre was enhanced when a \$9.2 million computerized control system was implemented. SCADA (Supervisory Control And Data Aquisition) and an associated energy management system (EMS) allow an operator to automatically switch lines in and out of service, to monitor power flows and to make decisions about the operation and security of the power system on an ongoing basis. The new SCADA/EMS system will allow us to extend management factors previously only available on the transmission system to the distribution system. As part of this evolution, we centralized Transmission and Distribution operations under one manager which has made for a more productive and cohesive work unit.

#### PLANTS . . .

In July 1992, the STOIC building at Point Lepreau was officially opened. The acronym STOIC stands for Simulator, Training, Office and Information Complex and, as the name suggests, the new building serves several functions. The complex is adjacent to the reactor building and houses a simulated nuclear control room. Simulators play a significant role in training operating personnel because they duplicate the operations of a nuclear generating station and respond accurately to simulated conditions.

Nuclear Engineering International, a British journal, again rated Point Lepreau the top performer in the world for reactors over 150 MW: The station's lifetime capacity factor, which is the percentage of maximum possible production, was 90.4% to the end of June 1992. The station was profiled in both Nuclear Engineering International and Nuclear News (a publication of the American nuclear industry). The journals examined how the station has been able to maintain its performance standards and how its operating and maintenance strategies might be applied to other reactors around the world.

Point Lepreau's simulator and its outstanding performance record are two reasons why it is in demand world wide as a training centre for the CANDU nuclear system.

The Grand Falls hydro-electric generating station is now over 60 years old and is still producing 45 MW from the original turbines and generators. As part of a program to ensure the continuation of the excellent generating record of this station, some rehabilitation has been started on Unit 1. Repairs were made to the spillway structure, the runner was replaced, the generator stator rewound and the unit transformer replaced.

The concrete of the Mactaquac dam suffers from a condition called alkaliaggregate reaction which causes the concrete to expand slowly over the years. The problem has occurred in more than 50 dams world wide.

Mactaquac was one of the first dams

where this condition was recognised and a comprehensive instrumentation system has been installed to monitor the concrete expansion. To date the 175-metre Mactaquac dam has grown larger by about 3 centimetres; however, a method has been developed at Mactaquac whereby the stresses that cause the structure to elongate are reduced by cutting the dam with a diamond wire. This remedial method has been approved by international experts and has been widely copied by other utilities. This year, five cuts were made. An international symposium was held in Fredericton in September 1992 to discuss the problems of alkaliaggregate reaction in other dams around the world.

As part of a cooperative effort to enhance the recreational use of the headponds, driftwood is removed at the Beechwood and Mactaquac dams following the spring runoff and either taken to a disposal site or burned. During the summer and fall months, the driftwood is removed from the shoreline using a barge supplemented by crews working under the government-funded Visual Enhancement Program.

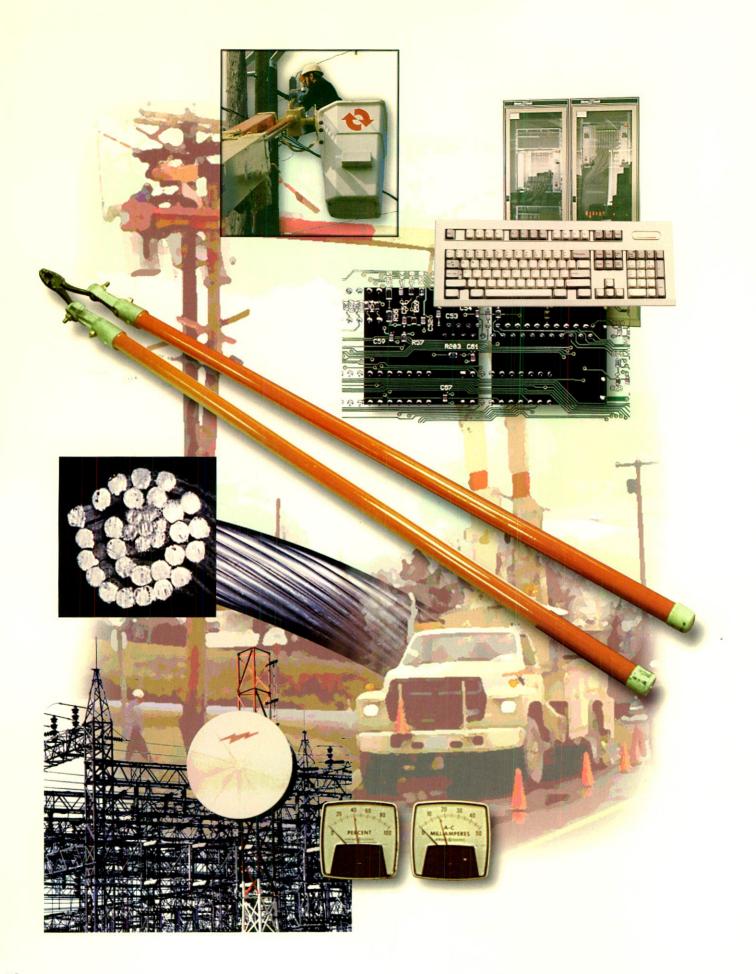
#### . . . AND DISTRICTS

In several districts work continued on the high pressure sodium retrofit program. This was a three year project to change all existing mercury vapour street lights to the more energy-efficient high pressure sodium lights and 97% of the total retrofit project has now been completed.

The Woodstock District office was extensively renovated and a stores complex was added. The new building was officially opened in August. A major stores renovation and reorganization was done in the district serving St. Stephen, St. George and Grand Manan for a more orderly and efficient storing system. Minor renovations were made to several district offices to make better use of the available work space.

A new 138-69 kV Woodstock terminal (the last 69 kV terminal to be added to the system in this decade) was completed and energized in November. Efforts are aimed at holding load on the 69 kV system to its existing capabilities. This will be accomplished by adding new substations directly to the 138 kV system which, with its higher capacity, is both more efficient and more economic. We built a new 138 kV substation in Fairvale near Saint John, with a second transformer on site to be installed in the near future, which allowed us to remove the existing 69 kV substation in Rothesay. Substations which are highly visible, like the one at Fairvale, are now being built with a lower profile and more emphasis on landscaping. We increased the capacity of the 138 kV substation at Tetagouche near Bathurst and have started to build new 138 kV substations in Douglastown near Newcastle and Saint-Basile near Edmundston.

As required, the older substations on the 69 kV system are gradually being rejuvenated with today's technology. We doubled capacity at the Doaktown substation and upgraded to digital metering. We also doubled the capacity at the Neguac and Grand Falls substations and we rebuilt the one at Eel River with double the capacity. Annual planned upgrades like these will keep the 69 kV system up-to-date and in reliable working order for many years to come.



### CUSTOMER SERVICE . . . WE'RE #1!

A recent provincial survey conducted for NB Power found that 91% of New Brunswickers rated the service they received from NB Power as "satisfactory to excellent". This confirmed a 1992 Canadian Electrical Association national survey which found NB Power's customer service satisfaction rating to be the highest in the country. Frequently cited reasons were NB Power's ability to provide reliable service, keep rates low and restore power in emergency situations. The fact that we continue to achieve high standards in customer service even during a difficult period of reduction and restraint is a testament to our employees' dedication and commitment.

Most districts reported an increase in customer requests for new or improved electrical service in the last year. The number of new services to homes was comparable to the previous year but new power loads for small businesses were up substantially along with line extensions to subdivisions, area lighting and water heater rentals.

### RATE INCENTIVES - A WAY TO HELP OUR CUSTOMERS

A rate incentive program for large industrial customers was designed in 1992-93 and filed with the Public Utilities Board (PUB) in February 1993. Under the incentive, new industries with a load of 2000 kilowatts or more, and existing industries which expand their operations by 2000 kilowatts or more, are eligible for the reduced rate. A hearing was held in the new fiscal year and the application granted in May. This incentive will benefit all our customers as sales to industrial customers should grow resulting in increased revenues. If 100 MW of excess capacity is sold under this incentive program, the increased revenues will mean that other inprovince rates will be approximately 1%-2% lower than otherwise would have been possible.

### NEW WAYS TO DO BUSINESS WITH NEIGHBOURING UTILITIES

During the year our export market was substantially reduced as a result of the recession and surplus capacity in New England, and high water levels in Hydro-Québec's reservoirs.

Although New England currently has short-term surplus capacity, we continue to explore opportunities for long-term sales and we are very active in the market place. In February 1993 we applied to the National Energy Board to continue to export firm capacity and energy for the next 10 years to serve all Eastern Maine Electric Co-op requirements. This application was approved in May 1993 as was an application to provide backup service to the Houlton Water Company in the event replacement of its entitlement from the Maine Yankee Nuclear Power Station is necessary. In addition to these exports, we're also looking at increasing our purchasing abilities and exporting our technology and expertise, especially in regard to our nuclear plant, to utilities at home and abroad.

### ENERGY MANAGEMENT AND CONSERVATION

Our objective remains a mix of demand and supply side management. In-province and export sales, however, have not climbed in the 1990s as in the past, resulting in more than expected surplus capacity. Thus we have deferred for two years our original target of a reduction in growth of 110 MW by 1996-97 as an interim measure. We are updating the 1990 integrated least-cost planning study to determine the current optimum level and timing of demand side management savings.

In summer 1992, we launched three new programs to encourage our customers in all sectors to better manage their use of electricity. The programs included incentives for home renovations, hot water savings, and changing to high efficiency motors. One of our most successful continuing programs is our \$1000 incentive for R-2000 housing. In 1991-92 117 New Brunswick homes were registered R-2000; in 1992-93 that number almost tripled to 339 homes. In New Brunswick R-2000 housing now represents 21% of all newly constructed urban single family units, the highest percentage in Canada. New Brunswick is the first province committed to building social housing to R-2000 standards and the first to register and certify R-2000 native housing units.

As part of the national "Power Smart month" marketing program (October 1992) NB Power participated with 12 other Canadian utilities and national retail chains to promote the purchase of Power Smart products.

#### HEALTH AND SAFETY

Sadly, in 1992-93 we had two fatalities. A second-year apprentice lineman received a fatal electrical shock in November while helping to build the new 345 kV transmission line between Newcastle and Bathurst. Two weeks later, a business supervisor from the Sackville district was fatally injured in a traffic accident while en route to attend an NB Power labour relations seminar. Apart from these two accidents, the severity of injuries suffered by employees at work decreased in 1992-93 when lost-time accidents represented a loss of 0.34 work-days per employee. The corresponding figure for the previous year was 0.61 work-days lost.

Statistics on work-related accidents are readily available from a new computer-based health and safety information system that we developed to permit more efficient management of information related to occupational accidents and workers' compensation claims.

Efforts in public safety focused on delivering education programs in electrical safety. We produced a new handbook on electrical safety for police and firemen which was distributed to all emergency personnel in the province. The book has been well received and we continue to get numerous requests for presentations on this subject. Our presentations on electrical safety to schools, adults and special interest groups such as contractors also continue to be in demand. For example, in 1992-93 NB Power gave over 800 presentations to schools alone.

### TRAINING - A KEY ELEMENT IN EMPLOYEE PRODUCTIVITY

For several years, NB Power has provided an in-house supervisory development program targeted at first-line supervisors. In spring 1992, we decided to increase our commitment to management development and, as a result, designed a new four-day program around the basic principles outlined in the nine-day supervisory development program already in place.

Other training is directed at all employees to help them stay abreast of technological changes in their current assignments. For example, in the Districts, all customer service staff were trained in proper telemarketing techniques. Employees in all areas routinely receive general skills upgrading opportunities including computer training, writing courses and the like.

Last year, NB Power had 203 employees indentured in 11 apprentice programs. This year the number is down to 81 as more apprentices are becoming certified journeymen.

The Health and Safety Division is responsible for radiation protection training courses and procedures at Point Lepreau. In terms of conventional safety, the Division spent much effort during the fiscal year in developing a "confined space" rescue course with both theoretical and practical components designed to meet the requirements of the Occupational Health and Safety Act.

#### LABOUR ISSUES

In 1992, NB Power completed a pay equity audit of its compensation system according to a 1989 agreement with IBEW Union Local 2309. Recommendations were made to adjust the wages for positions which were identified as underpaid in comparison with jobs of similar value. The system used was developed by Deloitte & Touche Management Consultants and a steering committee was comprised of union and management representatives. Local 2309 represents approximately 1000 NB Power employees at head office, generating stations and district offices. The recommended adjustments will be phased in with an effective date of November 1, 1992, according to the agreement.

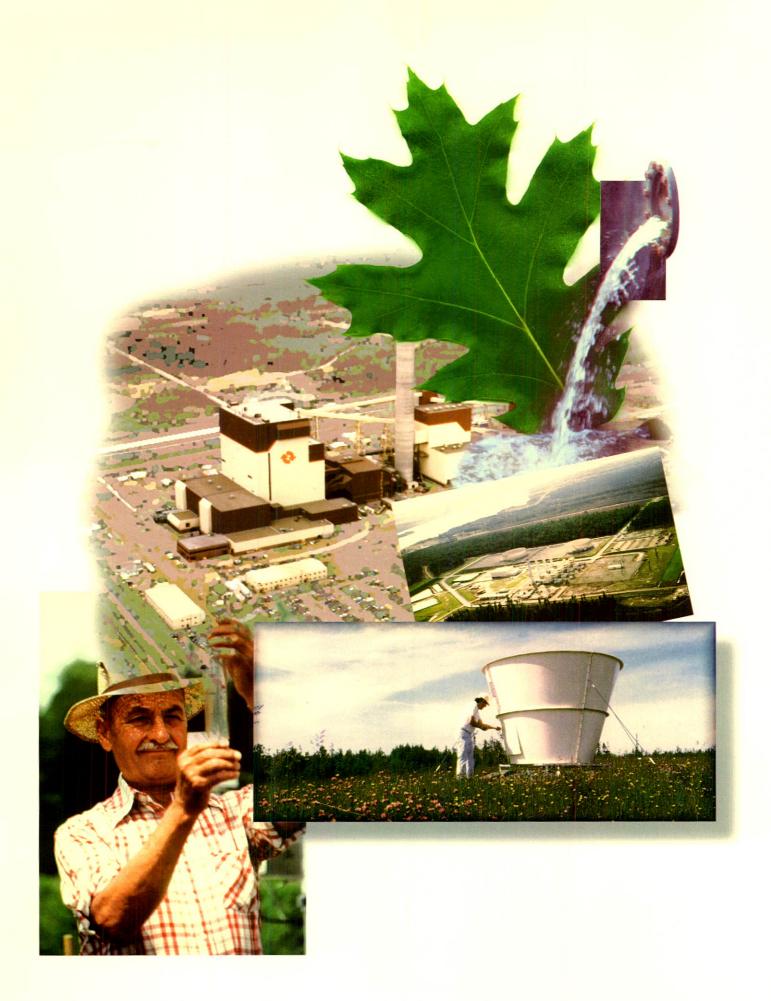
Collective agreements for the Administrative Support Group and the Technical Group were renegotiated and a tentative agreement with Local 1733 was ratified by the union membership subsequent to the end of the fiscal year. An application for the certification of Technical Specialists was withdrawn when an agreement was reached with Local 2309 on the establishment of a new union classification.

#### THE ENVIRONMENT

NB Power has always been aware of the variety and value of the natural resources of New Brunswick. Accordingly we have taken steps to sustain these resources while developing the generation required to meet the electrical demands of our customers. An excellent example of this sustainable development is our continuing effort to preserve and enhance Atlantic salmon stocks. For the second consecutive year, we made sure that the minimum elevation in the Tobique reservoirs did not fall below levels necessary to protect spawning areas for the lake trout populations in our reservoirs. We've also established the minimum discharge level from our storage dams so that we protect downstream Atlantic salmon spawning and nursery habitats.

When NB Power began work on the Belledune generating station, concerns were raised that dredging and blasting in the harbour would disturb the cadmium-contaminated sediment on the harbour bottom.

Accordingly, NB Power built containment cells to hold the dredged sediment. A report prepared by Fisheries and Oceans Canada, released at the beginning of the fiscal year, concludes that construction activities did not affect harbour crustaceans and that efforts to contain the contaminated sediment were successful.



NB Power again burned low sulphur oil at the Courtenay Bay generating station in summer 1992 which resulted in a reduction in sulphur dioxide emissions from the station between June and September. Other improvements at Courtenay Bay included modifying burners on two units which significantly improved combustion efficiency and installing equipment that continuously monitors atmospheric emissions. Courtenay Bay now can obtain air quality updates every five minutes instead of every hour from monitors throughout the city of Saint John.

Our acid rain monitoring program in the airshed around our Coleson Cove generating station is continuing to provide valuable data regarding the local deposition of acid rain in the Coleson Cove-Saint John airshed. The program has been extended to the entire province by the addition of a number of monitoring stations in northern New Brunswick. As well as sulphur emissions, nitrogen emissions also contribute to acid rain but it is becoming clear from the monitoring program that sources in New Brunswick including the Coleson Cove generating station contribute negligible amounts of wet nitrogen to acid rain falling in the

province. This supports the program's main findings, published in 1992, on the deposition of sulphur emissions. The monitoring program found that as much as 85% of the acid rain falling on the Saint John airshed is brought in by the prevailing winds from other parts of Canada and the northeastern United States.

A \$2.1 million project was completed at the Grand Lake generating station to collect and treat rainwater runoff from the coal pile before releasing it into Grand Lake. Grand Lake generating station staff are also looking at the possibility of an ammonia injection system to treat acidic atmospheric emissions.

In August 1992, NB Power's Central Technical Services successfully completed commissioning the first fully mobile stack emissions monitoring unit in Atlantic Canada. The unit, which also functions as a mobile environmental laboratory, monitors emissions data under normal operat-

ing conditions as well as during specific test programs. Most of our fossil-fuelled generating stations will be fitted with continuous emission monitoring systems by the end of fiscal 1993-94.

The provincial Department of the Environment is working on a clean air strategy for New Brunswick.

NB Power will be working with the department to identify key air quality issues relating to the utility's operations in light of its load forecast and generation plan. Main considerations in the clean air strategy include the Canada/New Brunswick sulphur dioxide emission reduction agreement, a management plan for nitrous oxides and volatile organic compounds and greenhouse gases such as carbon dioxides and CFCs.

### Financial Review

Total revenue for fiscal 1992-93 was \$903.1 million, a decrease of \$20.8 million or 2.2% from the previous year.

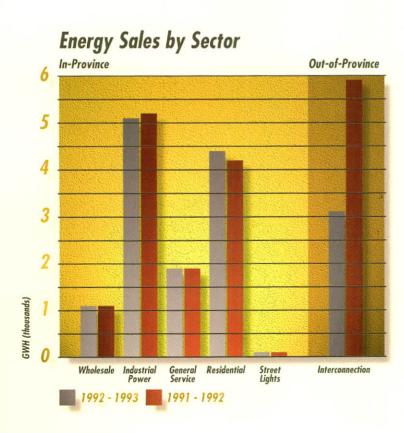
In-province revenues were up \$35.2 million or 5.0%. A mid-year rate increase effective October 1st, 1992 averaging 5% increased in-province revenues by \$19.8 million. Energy sales were up 1.6% overall despite a 1.3% decrease in sales to the industrial sector. This reflects the difficult competitive environment for the pulp and paper industry which accounts for almost 30% of the inprovince sales. The largest increases were in the residential, general services and wholesale sectors which grew 5.0%, 1.8% and 2.6% respectively. These increases, particularly for the residential sector, were in part due to winter weather being colder than average and colder than the winter of 1991-92.

Miscellaneous income rose \$5.2 million due to increased surcharges and an agreement to provide nuclear expertise to Romania.

Export sales revenues declined \$56.0 million or 24.9% year-over-year. Better hydro conditions in Québec led to lower sales to Hydro-Québec by \$40.0 million. The full year effect of lower Point Lepreau exports due to contract expiration October 1, 1991 reduced revenues by \$24.9 million. These exports had previously been for 230 MW and have now declined to 120 MW. General economic conditions and surplus capacity in New England caused a decrease of \$13.3 million.

As an offset to these reductions, the Millbank project, consisting of four 100-MW combustion turbines which came into service on November 1, 1991, provided export revenues of \$36.0 million compared to \$17.1 million in 1991-92 and revenue from other exports provided an additional \$3.3 million.

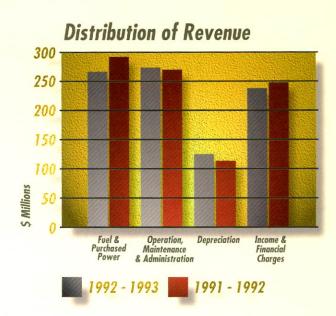
Energy exports decreased 46.8% to 3142 GWh in 1992-93 from 5901 GWh in 1991-92. Although selling prices increased, the benefits from opportunity sales decreased to \$30.1 million from \$51.7 million in the previous year.



While energy exports were down from fiscal 1991-92, earnings from export sales were \$6.9 million above forecast levels. This amount, offset by scheduled amortization of \$7.5 million of earnings from previous years, resulted in a net transfer from the export sales stabilization account to income of \$0.6 million.

The total cost of fuel and purchased power decreased by \$25.9 million or 8.9%, to \$266.4 million. Purchases, mainly from Hydro-Québec, decreased by \$42.1 million while higher oil prices resulted in increased fuel expenses.

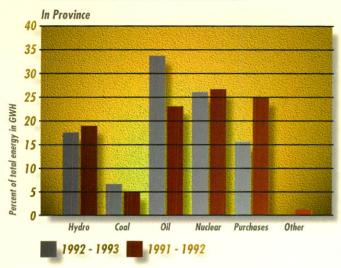
Hydro generation available for inprovince use declined below the long-term average resulting in a transfer from the Generation Equalization Account of \$7.7 million. Nuclear generation declined from 97% in 1991-92 to 87.3% due to an extended planned maintenance outage in 1992-93. However, due to system requirements, the generation able to be used in-province was below the expected average of 85%. As a result, \$0.2 million was transferred from the Generation Equalization Account.

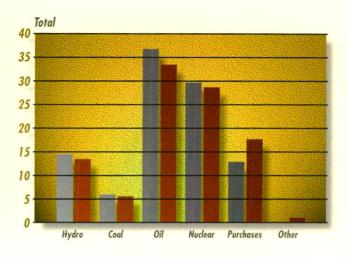


Operations, maintenance and administrative expenses increased \$3.4 million, or 1.3%, to \$273.5 million. Although the Corporation's efforts to control costs have decreased normal expenditures, overall costs rose year-over-year due to the longer Point Lepreau planned maintenance outage (\$5.5 million), the Sprayers of Dioxin Association settlement (\$2.5 million compared with \$1.4 million in 1991-1992), higher unfunded pension costs (\$2.6 million) and a provision for the disposal of PCB's in 1994-95 (\$2.0 million).

Depreciation expenses, which include decommissioning and fuel channel removal charges, increased \$11.7 million, or 10.3%, to \$125.2 million. The full year effect of the combustion turbines at Millbank and Ste-Rose brought in-service in November 1991 (\$5.4 million), Point Lepreau depreciation which escalates at 3% a year (\$1.2 million), the addition of the Northeast Transmission Project brought inservice in December 1992 (\$0.8 million) and other new asset additions accounted for the increase.

#### Generation and Purchases





Finance charges increased \$45.7 million, or 22.9% to \$245.4 million.

This increase is due primarily to higher foreign exchange costs of \$25.2 million as a result of a weaker Canadian dollar. Interest costs rose as the full year effect of capital construction projects at Millbank and Ste-Rose being brought into service in 1991-92 resulted in an additional \$14.1 million. Similarly, the Northeast Transmission Project completion in December 1992 added a further \$3.2 million.

Net income declined to \$1.1 million from \$25.1 million the previous year. All earnings were retained in the business.

Net property, plant and equipment increased \$394.6 million during the fiscal year. Cumulative spending on the 443-MW coal unit at Belledune was \$905 million at year-end, up from \$565 million at the end of March 1992. Work in progress at March 31, 1993 also included the Dalhousie Orimulsion™ project at \$81.9 million (\$15.9 million previous year).

Current assets increased from \$316 million to \$328 million during the fiscal year. Cash and short term investments increased \$28 million. Accounts receivable fell \$8 million.

Deferred charges at year-end stood at \$104 million compared to \$158 a year earlier. An update of future cost estimates during 1992-93 for decommissioning of the nuclear generating station resulted in a reduction in this deferred charge of \$102 million in the year. Unamortized foreign exchange differences accounted for \$35 million of the offsetting increase to deferred charges as the Canadian dollar weakened relative to its U.S. counterpart. At March 31, 1993, it took \$1.2572 Canadian to buy one U.S. dollar. The rate a year earlier was \$1.1899.

Net long-term debt increased during the year as a result of new borrowings as follows: U.S. \$100 million 8.75% debenture maturing 2022; Cdn. \$100 million 8.75% debenture maturing 1997; Cdn. \$100 million 8.375% debenture maturing 2002; Cdn. \$100 million 9.25% debenture maturing 2013; U.S. \$100 million 7.625% debenture maturing 2013 and Cdn. \$200 million 8.00% debenture maturing 2003. Call options were exercised for U.S. \$50 million 8.75% debentures maturing 2004; U.S. \$100 million 9.375% debentures maturing 2001 and U.S. \$75 million 8.75% debentures maturing 2007. The call options were financed by the issuance to the Province of New Brunswick of a U.S. \$120 million 7.125% debenture maturing 2002 and sinking fund withdrawals.

The average rate of interest on total long-term debt outstanding at March 31, 1993 was 9.5%. This compares to a rate of 9.7% at March 31, 1992. Of the total long-term debt outstanding at year-end, 71% was denominated in Canadian dollars and 29% in U.S. dollars. The previous year percentages were 70% Canadian, 26% U.S. and 4% in Swiss Francs.

The Corporation has no plans to borrow in foreign currencies other than U.S. dollars and it is targetting to limit new borrowings in U.S. currency to no more than one-third of on-going requirements. Should borrowings in other currencies be undertaken, it is anticipated that swaps would be used to convert currency exposure into Canadian or U.S. dollars.

Current liabilities decreased from \$546 million to \$293 million. The primary factor was a \$159 million decrease in current portion of long-term debt. Short-term indebtedness also decreased by \$80 million.

Deferred liabilities decreased \$85 million to a year-end level of \$380 million. The primary cause of the decrease is the update to the future cost estimate of nuclear unit decommissioning noted earlier.

Equity decreased by \$15 million to a year-end level of \$408 million. The Corporation transferred \$16 million to the Fuel Channel Removal account from Earnings invested in the Business as directed by the Public Utilities Board.



# Financial Statements

#### MANAGEMENT REPORT

The financial statements of the New Brunswick Power Corporation have been prepared by management in accordance with generally accepted accounting principles as established in Canada. These financial statements are the responsibility of management and have been approved by the Board of Directors. In management's opinion, the financial statements have been properly prepared in accordance with the accounting policies set out in notes to the financial statements. Financial information presented elsewhere in this annual report is consistent with that in the financial statements.

Management depends upon a system of internal controls to ensure that financial information is reliable and accurate and that assets are properly safeguarded. The controls and related systems are periodically reviewed by internal auditors.

The financial statements have been examined by the external auditors, Deloitte & Touche. Their responsibility is to express a professional opinion on the fairness of management's financial statements. The Auditors' Report outlines the scope of their examination and their opinion.

#### AUDITORS' REPORT

The Honourable Frank McKenna Premier of the Province of New Brunswick Fredericton, New Brunswick

Sir:

We have audited the consolidated balance sheet of New Brunswick Power Corporation as at March 31, 1993 and the consolidated statements of income, earnings invested in the business, and changes in financial position for the year then ended. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Corporation as at March 31, 1993 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles.

Deloite a Youle

Chartered Accountants

Fredericton, N.B. June 14, 1993



# CONSOLIDATED STATEMENT OF INCOME YEAR ENDED MARCH 31, 1993 (IN THOUSANDS OF DOLLARS)

	1993	1992
REVENUE		
Sales of power		
In-province	\$707,709	\$677,699
Out-of-province (Note 9)	169,195	225,229
Miscellaneous	26,181	20,957
	\$903,085	\$923,885
EXPENDITURE		
Purchased power	80,876	123,025
Fuel	185,498	169,247
Operations, maintenance, and administration	273,479	270,057
Depreciation (Note 10)	125,195	113,478
	665,048	675,807
Income before finance charges	238,037	248,078
Finance charges (Note 11)	245,399	199,733
Income (loss) before the following	(7,362)	48,345
Generation equalization adjustment (Note 12)	7,854	(10,321)
Transfer from (to) export sales stabilization account (Note 7)	643	(12,945)
	8,497	(23,266)
Net Income for the Year	\$ 1,135	\$ 25,079

### CONSOLIDATED BALANCE SHEET

AS AT MARCH 31, 1993 (IN THOUSANDS OF DOLLARS)

	1993	1992
PROPERTY, PLANT AND EQUIPMENT (NOTE 2)		
Land, buildings, plant and equipment, at cost, less accumulated		
depreciation, and construction-in-progress	\$3,696,503	\$3,301,947
CURRENT ASSETS		
Cash and short-term investments	85,303	57,393
Accounts receivable	152,436	160,026
Material, supplies and fuel	84,392	93,997
Prepaid expenses	6,369	4,773
	328,500	316,189
DEFERRED CHARGES		
Unrealized foreign exchange differences, less amounts amortized (Note 3)	60,308	25,789
Nuclear unit decommissioning (Note 4)	432	102,800
Debenture and note discount and issue expenses, less amounts amortized	30,305	27,532
Conservation and energy management	2,400	986
Other deferred charges	10,274	1,238
	103,719	158,345

\$4,128,722	\$3,776,481

On behalf of New Brunswick Power Corporation

Hon. J. Raymond Frenette, Chairman

\$ . 224

Gary D. Long, Ph.D., Chairman, Audit Committee

# CONSOLIDATED BALANCE SHEET AS AT MARCH 31, 1993 (IN THOUSANDS OF DOLLARS)

	1993	1992
LONG-TERM DEBT (NOTE 5)		
Guaranteed by the Province of New Brunswick	\$ 830,286	\$1,188,260
Debentures held by the Province of New Brunswick	2,228,924	1,322,242
Other long-term debt - not guaranteed	24,912	27,094
Other long term dest morganization	3,084,122	2,537,596
Less payments due within one year	36,478	195,139
zes payments are main one year	3,047,644	2,342,457
CURRENT LIABILITIES		
Short-term indebtedness (Note 6)	2,600	82,491
Accounts payable and accruals	89,953	125,081
Accrued interest	118,945	116,312
Current portion of long-term debt	36,478	195,139
Holdbacks on contracts in progress	45,181	26,728
	293,157	545,751
DEFERRED LIABILITIES		
Generation equalization account	149,648	157,502
Export sales stabilization account (Note 7)	20,184	20,827
Irradiated fuel management, nuclear unit decommissioning and		
fuel channel removal (Note 4)	199,393	259,744
Other (Note 8)	10,452	27,091
	379,677	465,164
EQUITY		
Earnings invested in the business	408,244	423,109
	\$4,128,722	\$3,776,481

# CONSOLIDATED STATEMENT OF EARNINGS INVESTED IN THE BUSINESS

YEAR ENDED MARCH 31, 1993 (IN THOUSANDS OF DOLLARS)

	1993	1992
Balance, beginning of year	\$423,109	\$222,030
Transfer from generation equalization reserve		176,000
Transfer to nuclear fuel channel removal account (Note 4)	(16,000)	
	407,109	398,030
Net income for the year	1,135	25,079
Balance, end of year	\$408,244	\$423,109

# CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION YEAR ENDED MARCH 31, 1993 (IN THOUSANDS OF DOLLARS)

	1993	1992
Net inflow (outflow) of cash related to the following activities:		
OPERATING		
Net income for the year	\$ 1,135	\$ 25,079
Amounts charged or credited to operations not requiring		
a current cash payment	144,384	122,301
	145,519	147,380
FINANCING		
Debt retirements and sinking fund payments	(375,435)	(124,379)
Long-term debt obligations issued	865,500	616;885
	490,065	492,506
INVESTING		
Expenditure on property, plant and equipment	(523,258)	(544,238)
Expenditure on irradiated fuel management	(2,293)	(2,267)
Increase in deferred charges	(11,531)	(847)
Amounts financed by customer contributions and proceeds		
on disposal of property, plant and equipment	7,742	6,383
	(529,340)	(540,969)
Net change in non-cash working capital balances	1,557	12,729
Net cash inflow	107,801	111,646
Cash position, beginning of year	(25,098)	(136,744)
Cash position, end of year	\$ 82,703	\$ (25,098)
Represented by		
Cash and short-term investments	\$ 85,303	\$ 57,393
Short-term indebtedness	(2,600)	(82,491)
	\$ 82,703	\$ (25,098)

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

YEAR ENDED MARCH 31, 1993 (TABULAR AMOUNTS ONLY ARE IN THOUSANDS OF DOLLARS)

#### 1. ACCOUNTING POLICIES

The financial statements have been prepared in conformity with generally accepted accounting principles as established in Canada and give effect to the rate-setting process. The financial statements include the accounts of the Corporation and those of its wholly owned subsidiary, N.B. Coal Limited.

#### a. Public Utilities Board

Changes in the Corporation's charges, rates and tolls for services provided in the province have since January 1, 1990 been subject to approval by the Board of Commissioners of Public Utilities of the Province of New Brunswick (Public Utilities Board).

#### b. Property, plant and equipment

The cost of additions to property, plant and equipment is the original cost of contracted services, direct labour and material, interest on funds used during construction and indirect charges for administration and other expenses, less credits for the value of power generated during commissioning. Administration and other expenses are capitalized during construction by applying a portion of such overheads to direct construction costs incurred each month.

Interest during construction is capitalized monthly based on the cost of long-term borrowings. Contributions in aid of construction include amounts received from customers as well as research and development grants in respect of new facilities and are netted against the cost of plant financed thereby. Amounts received from customers are being amortized over the estimated service lives of the related assets, and the resulting credit is offset against the corresponding provision for depreciation.

Depreciation is provided for all assets sufficient to amortize the cost of such assets, less estimated salvage value where applicable, over their estimated service lives. The nuclear generating station is depreciated using an escalating charge method with annual increases based upon a 3% factor. Depreciation is provided on certain mining equipment on an increasing charge basis, the depreciation amount being based on the amount of related debt retirement required during the year. All other assets are depreciated on a straight-line basis. Depreciation is provided on the net cost of property, plant and equipment in respect of which grants have been provided. The facility lives of the main categories of property, plant and equipment, which are reviewed periodically, are currently as follows:

Each asset category includes components with service lives less than their related facility life.

The Corporation has made no provision in its accounts for the future costs of decommissioning its thermal generating stations. At the present time, the Corporation intends to redevelop all existing thermal generating station sites for future use at the completion of their current useful lives and has no intention of abandoning the sites.

#### c. Inventories

Inventories of materials and supplies are valued at average cost. Oil, nuclear fuel, and coal inventory is valued at cost using the first-in, first-out method. Coal inventory includes the costs of direct labour and overhead.

#### d. Debenture and note discounts and premiums, and issue expenses

The Corporation amortizes debenture and note discounts and premiums and the expenses of issues over the lives of the issues to which they pertain.

Assets	Years	Assets	Years
Hydro Generating Stations	100	Transmission System	35 to 55
Thermal Generating Stations	35	Distribution System	32
Nuclear Generating Station	31	Buildings	
Gas Turbine Generating Station	s 20	- General	40
Diesel Generating Station .	25	- Head Office	50
Terminals and Substations	40	Mining equipment	20 to 25

### 1. Accounting Policies (CONTINUED)

#### e. Other deferred charges

Costs incurred which are intended to create a benefit in a future period are deferred and shown in the balance sheet, net of amounts amortized, under deferred charges. The following are the principal categories of such costs:

- Costs incurred for conservation and energy management, including interest capitalized on programs with long-term benefits;
- Other deferred charges, which include:
- survey and engineering expenses relating to construction projects being considered;
- preproduction and net development costs relating to mining operations;
- certain training costs associated with the development of new facilities;
- the costs of major geological studies undertaken to establish the location and quality of coal deposits.

Conservation and energy management charges are amortized against future income over the periods expected to benefit from the programs carried out. Costs relating to new construction projects continue to be deferred until a project is authorized for construction by the Corporation or is cancelled. They are then amortized against future income either by annual depreciation charges, resulting from certain of the items being capitalized, or directly, over an appropriate period of time not exceeding five years. All other deferred charges are amortized against future income over an appropriate period of time not exceeding five years.

#### f. Foreign exchange transactions

Monetary assets and liabilities denominated in foreign currencies are translated to Canadian dollars at rates of exchange prevailing at the balance sheet date except where such items have been hedged by the acquisition of a forward exchange contract, in which case the rate established by the terms of the contract is used in the translation. Unrealized losses or gains arising on translation of long-term items are amortized to income on a straight-line basis over the remaining life of the related monetary assets or liabilities, except that amounts associated with the financing of major construction projects still in progress are deferred until the project is completed before being amortized over the then remaining life of the related monetary liabilities. The unamortized balance of the deferred exchange gains or losses is accumulated in an unrealized foreign exchange account which is shown on the balance sheet under deferred charges.

Exchange gains or losses resulting from transactions affecting current operations are reflected in income as realized.

#### g. Revenue

Billings to residential and general service customers are rendered monthly on a cyclical basis. All other customers are billed at the end of each month. Revenue in respect of items not billed at the end of a fiscal period is estimated and accrued.

#### h. Deferred costs or revenues

The Corporation's power rates are established annually to recover its operating costs and a return on its investment consistent with prudent financial management. Each year certain factors relating to water flow conditions, nuclear operating performance and export sales transactions, which are largely outside the control of the Corporation, may result in costs or revenues which vary from those originally included in the calculation of revenue requirements. The Corporation accounts for such variations through a Generation Equalization Adjustment and an Export Sales Stabilization Account.

#### **Generation Equalization Adjustment**

In order to equalize the fluctuations in generating costs caused by variations from average water flow conditions and nuclear operating performance, the Corporation annually charges or credits income with an amount calculated to adjust such costs to an average value. The offsetting debit or credit is included in the generation equalization account. The calculation of the adjustment is based on historical water flow data compiled over a period of 35 years and on the performance expectations of the nuclear generating station developed from comparable industry statistics and the operating experience of the nuclear unit itself.

#### **Export Sales Stabilization Account**

The Corporation annually charges or credits income with the difference between actual and forecast earnings on export sales transactions, other than those under participation or ownership contracts, with neighbouring utilities. The offsetting debit or credit is included in the Export Sales

### 1. Accounting Policies (CONTINUED)

Stabilization Account. Amounts deferred are being brought into the calculation of future revenue requirements over a period of two years and amortized to the income statement on this basis.

#### i. Irradiated fuel management, nuclear unit decommissioning and fuel channel removal

In order to provide for the estimated future costs of permanently disposing of irradiated nuclear fuel and decommissioning the nuclear generating station to return the site to a state of unrestricted use, the Corporation annually charges income with amounts calculated to be adequate, when accumulated with interest, to cover the total costs of these future activities as they occur. The calculations of the anticipated future costs are based on a detailed study which takes into account various assumptions regarding the method and timing of dismantlement of the nuclear facility, the cost of transportation of nuclear material to permanent disposal facilities, and estimates of interest and inflation rates in the future. With respect to irradiated nuclear fuel, the annual charge is related to the amount of nuclear fuel consumed while the decommissioning requirements are on the basis of equal annual amounts over the life of the unit.

The Corporation is also providing through an annual charge to income for the estimated future costs of removing fuel channels at the nuclear generating station for replacement. The anticipated future

costs have been calculated based on the experience already developed by another Canadian electric utility and on the assumption that fuel channel replacement will become necessary in 1998.

Costs incurred on a current basis relating to irradiated fuel management, nuclear unit decommissioning and fuel channel removal are charged directly against the deferred liability account.

The Corporation is accounting for these transactions through means of deferred asset and deferred liability accounts. The total amount required to be collected over the life of the unit to cover decommissioning activities was recorded in these accounts as of the date the nuclear unit was placed in service. The deferred asset account is reduced annually by the amount collected from customers for decommissioning. The deferred liability account is increased each year by the amount collected from customers to cover fuel channel removal and disposal of irradiated nuclear fuel consumed during the year and by interest, compounded annually, on the accumulated amounts collected. Interest is calculated at the Corporation's long-term borrowing rate and is charged to income annually. Both accounts are adjusted periodically to reflect changes in amounts to be collected from customers as a result of revisions to the decommissioning estimate.

In view of potential developments in the technology of decommissioning, fuel channel removal and irradiated fuel management, and because of the various assumptions and estimates inherent in the calculations, the Corporation reviews such calculations periodically, making adjustments as necessary on a prospective basis.

#### j. Pension plans

Corporation employees belong to the Province of New Brunswick Public Service Superannuation Plan. This multi-employer plan provides pensions based on length of service and average of the highest five consecutive years of earnings. The Corporation and its employees make contributions to the plan as prescribed in the Public Service Superannuation Act. The Corporation's contributions are charged to income annually. In addition, the Corporation annually charges income with amounts calculated to be adequate, when accumulated with interest at a rate specified by the Province, over a 25 year period, to fund the estimated unfunded pension obligation as determined by the Corporation's actuaries.

N.B. Coal maintains a contributory defined benefit pension plan for its employees. Pension costs are actuarially determined each year using the projected benefit method pro-rated on services and management's best estimate assumptions. Adjustments arising from plan amendments, experience gains and losses, changes in actuarial assumptions and the differences between the actuarial present value of accrued pension obligations and the market related value of pension assets are amortized on a straight-line basis over the expected average remaining service lives of the respective employee group. The market-related value of pension plan assets is the estimated market value as at March 31, 1993.

2.	PROPERT	Y, PLANT	AND	EQUIPMENT
	THE RESERVE OF THE PARTY OF THE	Principal Charles	4410-6100	在中国人们的对方。在1000年代,在1000年代,1000年代。

1993

1992

1992

		ALL MORRAL WATER
Land, buildings, plant and equipment, at cost		
Power generating stations	\$2,661,892	\$2,638,611
Transmission system	240,206	194,931
Substations	331,409	301,451
Distribution system	515,749	487,081
Other properties	55,972	46,974
Communications equipment	15,824	10,797
Mining equipment and related assets *	74,537	72,559
Motor vehicles and miscellaneous equipment	72,791	69,119
	3,968,380	3,821,523
Less: Contributions in aid of construction	21,462	20,666
Research and development grants	72,000	72,000
	93,462	92,666
The state of the s	3,874,918	3,728,857
Less: Accumulated depreciation	1,194,034	1,083,282
	2,680,884	2,645,575
Construction-in-progress	1,015,619	656,372
	\$3,696,503	\$ 3,301,947

<sup>\*</sup> Includes \$34,899,000 (1992 - \$35,312,000) being the gross amount of assets under capital lease. Accumulated depreciation includes \$17,399,000 (1992 - \$15,801,000) with respect to these assets.

# Exchange adjustment at balance sheet date On debentures and notes issued by the Corporation Payable in Swiss francs Payable in United States dollars 17,945

3. UNREALIZED FOREIGN EXCHANGE DIFFERENCES,

Payable in Swiss francs \$ - \$ 36,331
Payable in United States dollars 17,945 54,917
On other debentures issued
Payable in United States dollars 58,538 5,383
Exchange adjustment on assets denominated in foreign currencies
held in sinking funds maintained by the Province of New Brunswick (100) 3,588
76,383 100,219

Less accumulated amortization	16,075	74,430
	\$ 60,308	\$ 25,789

4. IRRADIATED FUEL MANAGEMENT, NUCLEAR UNIT DECOMMISSIONING AND FUEL CHANNEL REMOVAL	1993	1992
	A STATE OF THE PARTY OF THE PAR	
Balance, beginning of year	\$259,744	\$239,992
Adjustment to deferred liability for costs of decommissioning	(97,472)	
Adjustment to deferred liability for fuel channel removal	16,000	
Amounts collected from customers to cover cost of		
- fuel channel removal	2,080	2,080
- disposal of nuclear fuel consumed during the year	3,131	3,135
- interest	18,203	16,804
	201,686	262,011
Less expenditures incurred during year	(2,293)	(2,267)
Deferred liability account for irradiated fuel management,		
nuclear unit decommissioning and fuel channel removal	199,393	259,744
Less deferred asset account for nuclear unit decommissioning	432	102,800
Net amount collected from customers	\$198,961	\$156,944

Charges for irradiated fuel management, nuclear unit decommissioning and fuel channel removal, including interest, are brought into the calculation of revenue requirements each year and collected from in-province and interconnected customers through sales of power. The net amount collected, after deducting costs incurred to date for these activities, is represented by the difference between the liability account and the deferred asset account for nuclear unit decommissioning. This amount is currently being utilized by the Corporation as a source of funds.

In its May, 1991 decision concerning the Accounting and Financial Policies of the Corporation, the Public Utilities Board directed that, for rate making purposes, an additional \$16,000,000 be withdrawn from earnings invested in the business for fuel channel removal costs and that future charges be recomputed accordingly. The Corporation has processed this retroactive adjustment to earnings invested in the business during the year ended March 31, 1993.

The reduction in the liability for decommissioning, and a corresponding reduction in the deferred asset account, resulted from a periodic update of the future cost estimate carried out during the year. This review will also result in lower annual charges for disposal of nuclear fuel consumed.

#### 5. LONG-TERM DEBT

Guaranteed by the Province of New Brunswick Debentures and notes issued by the Corporation

Date of maturity	Canadian	U.S.	1993	1992
Years ending:				
March 31 1993	\$ -	\$ -	\$ -	\$ 244,070
March 31 1994	6,000	22,410	28,410	27,210
March 31 1995	13,790	78,984	92,774	88,545
March 31 1996	60,300	9,838	70,138	69,611
March 31 1997	26,100	17,695	43,795	42,848
March 31 1998	20,000	1,980	21,980	
1 - 5 years	126,190	130,907	257,097	472,284
6 - 10 years	142,884	18,952	161,836	301,686
11 - 30 years	425,000		425,000	573,738
Debentures and notes	\$694,074	\$149,859 *	843,933	1,347,708
Sinking funds			371,198	525,498
			472,735	822,210
The weighted average interest rate on debend March 31, 1993 is 10.1% (1992 - 9.5%)	tures and notes outstandin	g at		
Atomic Energy of Canada Limited - note paya			300 115	307 910
Atomic Energy of Canada Limited - note paya principal and interest at 9.7064% per annum Northern Canada Power Commission - loans	to the year 2008 (see Note	e 14)	300,115	307,919
principal and interest at 9.7064% per annum  Northern Canada Power Commission - loans cipal and interest at rates varying from 4 1/29	to the year 2008 (see Note repayable in annual instalm to 8 1/2% per annum to	ments of prin- the year 2011	300,115 28,387	
Principal and interest at 9.7064% per annum  Northern Canada Power Commission - loans cipal and interest at rates varying from 4 1/29  Mitsui & Co. (Canada) Ltd notes payable in	to the year 2008 (see Note repayable in annual instalm to 8 1/2% per annum to ten equal semi-annual ins	ments of prin- to the year 2011	28,387	30,971
principal and interest at 9.7064% per annum  Northern Canada Power Commission - loans cipal and interest at rates varying from 4 1/29	to the year 2008 (see Note repayable in annual instalm to 8 1/2% per annum to ten equal semi-annual ins	ments of prin- to the year 2011		307,919 30,971 27,160

## 5. LONG-TERM DEBT (CONTINUED)

Total other long-term debt - not guaranteed

Debentures held by the Province of New Brunswick

Year of maturity	Canadian	U.S.	1993	1992
Years ending:			AND THE RESERVE	
March 31, 1996	\$ 50,000	\$ 51,545	\$ 101,545	\$ 98,786
March 31, 1997	100,000		100,000	100,000
March 31, 1998	100,000	-	100,000	
1 - 5 years	250,000	51,545	301,545	198,786
6 - 10 years	875,000	181,037	1,056,037	603,558
11 - 30 years	350,000	553,168	903,168	535,576
Debentures outstanding	\$1,475,000	\$785,750 *	2,260,750	1,337,920
Sinking funds	第三个子 " <u>据</u> 工"。		31,826	15,678
			\$2,228,924	\$1,322,242
Other long-term debt - not guaranteed  Government of Canada - payable in equa	l annual instalments of princip	oal and interest		
Other long-term debt - not guaranteed Government of Canada - payable in equa at rates varying from 9 1/4% to 9 5/8% p		oal and interest	\$ 5,550	\$ 5,669
Government of Canada - payable in equa		oal and interest	\$ 5,550	\$ 5,669
Government of Canada - payable in equal at rates varying from 9 1/4% to 9 5/8% problems of the capital lease.  Obligations under capital lease.  Dragline lease of N.B. Coal payable toget.	her with interest at 9.79% per	annum in	\$ 5,550	\$ 5,669
Government of Canada - payable in equa at rates varying from 9 1/4% to 9 5/8% p  Obligations under capital lease	her with interest at 9.79% per	annum in	\$ 5,550	\$ 5,669
Government of Canada - payable in equal at rates varying from 9 1/4% to 9 5/8% problems of the control of the control of the capital lease.  Obligations under capital lease. Dragline lease of N.B. Coal payable toget.	her with interest at 9.79% per	annum in	\$ 5,550 18,802	
Government of Canada - payable in equa at rates varying from 9 1/4% to 9 5/8% p  Obligations under capital lease  Dragline lease of N.B. Coal payable toget equal semi-annual instalments to the year	her with interest at 9.79% per	annum in		\$ 5,669 20,441 984

\$24,912

\$27,094

## 5. LONG-TERM DEBT (CONTINUED)

#### Long-term debt payments

Long-term debt maturities (after deducting sinking funds estimated to be available at maturity inclusive of actual earnings to March 31, 1993 and future earnings calculated at projected interest rates) and sinking fund requirements, and minimum lease payments, in respect of debt outstanding at March 31, 1993 are as follows for the five years ending March 31, 1998, using exchange rates in effect at March 31, 1993 for debt denominated in foreign currencies:

	Debt maturities and	Minimum lease	
	sinking fund obligations	payments	
Year ending March 31, 1994	\$ 31,829	\$ 3,775	
Year ending March 31, 1995	96,477	3,739	
Year ending March 31, 1996	87,753	3,459	
Year ending March 31, 1997	130,686	3,458	
Year ending March 31, 1998	124,361	3,458	
Years ending March 31, 1999 - 2000		10,142	
Total minimum lease payments		28,031	
Less amount representing implicit interest		8,669	
		\$19,362	

#### Sinking funds

The Minister of Finance of the Province of New Brunswick, as Trustee for the Corporation, maintains a sinking fund for all debenture issues requiring same. Sinking fund earnings are reflected in the Corporation's income. Corporation debentures held in the fund are not cancelled until maturity.

## 6. SHORT-TERM INDEBTEDNESS

Short-term borrowings from banks are payable on demand and are reflected on the balance sheet, together with outstanding cheques, under the caption "Short-term indebtedness". The Corporation has bank lines of credit, guaranteed by the Province of New Brunswick, for short-term borrowings totalling \$120,000,000. In addition, the Corporation borrows funds for temporary purposes from other sources, including the Province of New Brunswick, from time to time.

N.B. Coal has bank lines of credit which are secured by a general assignment of book debts and a chattel mortgage on certain assets.

The total of all short-term borrowings was \$1,752,000 at March 31, 1993 (1992 - \$67,737,000).

7. EXPORT SALES STABILIZATION ACCOUNT	1993	1992
Balance, beginning of year	\$20,827	\$ 7,882
Excess of actual over forecast earnings from export sales for year	6,935	19,549
Amount amortized	(7,578)	(6,604)
	(643)	12,945
Balance, end of year	\$20,184	\$20,827

1993	1992
\$ -	\$20,184
11,137	7,910
685	512
11,822	28,606
1,370	1,515
\$10,452	\$27,091
	\$ - 11,137 685 11,822 1,370

The Corporation's share of the Province's unfunded pension obligation amounted to \$123,474,000 as at March 31, 1993 (1992 - \$139,510,000). Contributions towards the Corporation's share of the unfunded liability charged to income during the period amounted to \$6,198,000 (1992 - \$5,327,000). Regular contributions to the New Brunswick Public Service Superannuation Plan of \$7,939,000 (1992 - \$7,597,000) were also charged against income.

During the year, the Corporation remitted the sum of \$26,382,000, representing an amount of \$20,184,000 charged against income in previous years together with \$6,198,000 charged during the year ended March 31, 1993, to the Province of New Brunswick.

The actuarial present value of N.B. Coal's accrued pension benefits as at March 31, 1993 was estimated to be \$4,160,000 (1992 - \$3,858,000) and the market related value of pension fund assets was \$5,078,000 (1992 - \$4,305,000). N.B. Coal's net pension expense for the year was \$146,000 (1992 - \$168,000). N.B. Coal also has pension expense amounting to \$567,000 (1992 - \$511,000), relating to the amortization over the estimated average service lives of the remaining employees of an unfunded early retirement plan with accrued benefits estimated at \$4,100,000.

## 9. SALES OF POWER

Out-of-province sales of power include \$64,382,000 (1992 - \$108,108,000) to utilities in the United States. The price of these sales includes incremental fuel and operating costs plus a margin of net benefit to the Corporation.

10. DEPRECIATION	1993	1992
Depreciation expense	\$118,220	\$106,503
Charges for decommissioning	4,895	4,895
Charges for fuel channel removal	2,080	2,080
	\$125,195	\$113,478
11. FINANCE CHARGES	1993	1992
Interest expense	\$345,557	\$303,650
Less: Income from sinking funds and other investments	55,597	63,875
	289,960	239,775
Provincial government guarantee fee	16,566	13,778
Amortization of debenture discount and expense	3,290	3,470
Amortization of unrealized foreign exchange	15,878	(3,317)
	325,694	253,706
Less: Interest capitalized	80,295	53,973
	\$245,399	\$199,733

## 12. GENERATION EQUALIZATION ADJUSTMENT

Commencing in April, 1992, the application by the Corporation of the basis for computing the cost savings resulting from greater than average water and nuclear generation has reflected the fact that such generation no longer always replaces thermal generation for in-province supply.

In its April, 1993 decision, the Public Utilities Board directed that, for rate making purposes, the Corporation calculate the adjustments to income through the generation equalization account using the cost of thermal generation in the determination of the value of variations from average generating costs. Had the Corporation followed this basis in the preparation of its financial statements for the year ended March 31, 1993, the generation equalization adjustment would have been reduced by \$6,627,000.

The Corporation believes that implementation of the Board's decision in that fashion would result in a failure to properly account for the circumstances experienced by the Corporation during the year. Furthermore, the financial statements fairly present the generation equalization adjustment in accordance with the stated accounting policy and the principles approved by the Board in its May, 1991 decision.

## 13. CAPITAL COMMITMENTS

The Corporation is constructing a 443 megawatt thermal generating unit at Belledune. The estimated cost is \$965,700,000 based on a target in-service date of July, 1993. An additional \$19,600,000 will have been expended to make provision for a future second unit at this multi-unit site. Expenditures to March 31, 1993 amounted to \$905,310,000 (1992 - \$565,506,000).

The Corporation is installing a scrubber and is converting its Dalhousie Generating Station to facilitate the burning of orimulsion fuel. The estimated cost of the program is \$338,000,000. Expenditures to March 31, 1993 amounted to \$81,865,000 (1992 - \$15,864,000).

#### 14. SUBSEQUENT EVENTS

On April 1, 1993 the Corporation issued \$100,000,000 debentures, repayable on March 17, 2003, bearing interest at 8%, to the Province of New Brunswick.

On April 1, 1993, the Corporation repaid the full amount of its note payable to Atomic Energy of Canada Limited (see Note 5).

On June 2, 1993, the Corporation made a commitment to issue on June 28, 1993 \$100,000,000 debentures, repayable on June 28, 2013 bearing interest at 81/2%, to the Province of New Brunswick.

# Corporate Information

## **BOARD OF DIRECTORS**



(seated from left): Ann Charlotte Bonnell, Brenda Pirie Seheult, J. Raymond Frenette (Chairman), Jeanne Comeau, Nathan Rubin (standing from left): Delvan O'Brien, Bill Malenfant, G. Linwood Titus, Richard Duguay, Gary Long, George Lloyd

## MANAGING OFFICERS

G. Linwood Titus

President & Chief Executive Officer

Charles F. Baird
Senior Vice-President, Engineering & Operations

Roland Lutes
Senior Vice-President, Finance & Administration

Peter J. Dykeman, Q.C. *Corporate Secretary* 

# **Statistical Overview**

# STATEMENT OF GENERATION AND SALES (MILLIONS OF KILOWATT HOURS)

GENERATION Fiscal Y	ear 1992-93	1991-92	1990-91	1989-90	1988-89
Hydro	2,544.9	2,719.8	3,333.7	2,432.9	2,302.2
Thermal	7,486.3	8,036.5	6,506.3	9,320.1	7,898.2
Nuclear	5,197.4	5,793.1	5,857.5	5,498.1	5,747.0
Combustion turbine	19.0	96.3	1.4	10.3	2.0
Purchases	2,261.1	3,573.9	3,620.0	3,913.8	3,359.9
Gross generation & purchases	17,508.7	20,219.6	19,318.9	21,175.2	19,309.3
Station service	913.1	941.8	882.7	1,008.0	947.1
Net generation & purchases	16,595.6	19,277.8	18,436.2	20,167.2	18,362.2
Losses - transformer & transmission	n 537.0	614.3	646.5	666.2	651.6
Total energy available for distribut	ion 16,058.6	18,663.5	17,789.7	19,501.0	17,710.6

SALES I	Fiscal Year 1992-93	1991-92	1990-91	1989-90	1988-89
Wholesale	1,083.5	1,055.9	1,023.8	1,028.0	971.4
Industrial power	5,127.7	5,196.0	4,719.8	5,180.8	5,069.4
General service	1,906.0	1,871.4	1,786.2	1,740.2	1,633.4
Residential	4,395.2	4,187.8	4,053.9	3,965.5	3,734.1
Street lights	69.5	71.0	71.0	67.3	63.2
Total in-province sales	12,581.9	12,382.1	11,654.7	11,981.8	11,471.5
Interconnections	3,142.2	5,901.2	5,812.9	7,190.7	5,946.4
Grand total sales	15,724.1	18,283.3	17,467.6	19,172.5	17,417.9
Internal use	0.0	0.0	0.0	0.4	0.4
Distribution losses	334.5	380.2	322.1	328.1	292.3
Total energy distributed an	nd sold 16,058.6	18,663.5	17,789.7	19,501.0	17,710.6

# STATEMENT OF SALES (MILLIONS OF DOLLARS)

SALES	Fiscal Year	1992-93	1991-92	1990-91	1989-90	1988-89
Wholesale		61.5	58.4	55.1	54.0	51.2
Industrial power		223.9	220.7	205.9	213.6	205.7
General service		139.5	134.2	126.0	120.2	113.7
Residential		269.8	251.9	239.7	227.4	216.2
Street lights		13.0	12.5	12.1	11.2	10.5
Total in-province sales		707.7	677.7	638.9	626.5	597.4
Interconnections		169.2	225.2	249.4	313.0	242.3
Sales of power		876.9	902.9	888.3	939.5	839.7
Miscellaneous		26.2	21.0	19.9	17.8	16.5
Total revenue		903.1	923.9	908.2	957.3	856.2

# STATEMENT OF IN-PROVINCE GENERATION (MILLIONS OF KILOWATT HOURS)

Fiscal Year	1992-93	1991-92	1990-91	1989-90	1988-89
Hydro	2,521.6	2,698.4	3,332.3	2,423.3	2,301.9
Coal	964.3	690.1	633.8	852.4	633.0
Heavy fuel oil	4,831.6	3,278.4	3,072.9	4,254.5	3,634.0
Orimulsion		106.0			
Nuclear	3,731.3	3,795.7	3,524.0	3,380.9	3,537.3
Other (Chatham)		10.5	49.4		
Combustion turbine	16.4	71.7	0.4	3.1	0.6
Purchases	2,230.9	3,553.0	2,753.9	2,930.1	3,112.6
Gross generation & purchases	14,296.1	14,203.8	13,366.7	13,844.3	13,219.4
Station service	842.7	827.4	743.4	867.8	803.6
Net generation & purchases	13,453.4	13,376.4	12,623.3	12,976.4	12,415.8
Losses - transformer & transmission	537.0	614.3	646.5	666.2	651.6
Total energy available for distribution	12,916.4	12,762.1	11,976.8	12,310.2	11,764.2

## PEAK DEMAND AND CAPACITY (MEGAWATTS)

Fiscal Year	1992-93	1991-92	1990-91	1989-90	1988-89
System net generating capacity	3,727	3,725	3,225	3,224	3,172
Firm capacity purchases	115	105	155	105	55
Total available resource	3,842	3,830	3,380	3,329	3,227
In-province system net peak	2,654	2,728	2,566	2,562	2,303
Firm exports	141	540	265	355	520
Total demand	2,795	3,268	2,831	2,917	2,823

## **OPERATING STATISTICS**

March 31st	1993	1992	1991	1990	1989
Kilometers transmission lines	6,656	6,451	6,329	6,277	6,255
Kilometers distribution circuits	25,631	25,539	25,097	24,601	24,555
Number residential customers	258,088	253,621	249,639	245,449	239,598
Number industrial customers	1,600	1,592	1,561	1,558	1,695
Number general service customers	22,109	21,909	21,789	21,233	20,425
Number street light customers	3,114	3,294	3,141	3,002	2,741
Direct Customers	284,911	280,416	276,130	271,242	264,459
Indirect customers	40,360	40,019	39,941	39,494	39,081
Total customers	325,271	320,435	316,071	310,736	303,540
Number of employees - regular	2,700	2,775	2,725	2,628	2,480
Number of employees - temporary	327	399	357	221	163
Number of employees - N.B. Coal Limited	168 *	202	204	198	222

<sup>\*</sup> Includes 12 NB Power employees seconded to N.B. Coal Limited

## INCOME STATEMENT SUMMARY (IN-\$MILLIONS)

Fiscal Year	1992-93	1991-92	1990-91	1989-90	1988-89
Sale of power					
In-province revenue	707.7	677.7	638.9	626.5	597.4
Out-of-province revenue	169.2	225.2	248.0	311.6	240.9
Miscellaneous	26.2	21.0	21.6	19.4	18.0
Total fuel & purchases	266.4	292.3	305.1	368.1	274.3
Operations, maintenance & administration	273.5	270.1	266.3	244.7	221.1
Net financial	245.4	199.7	211.6	197.5	200.4
Depreciation & decommissioning	125.2	113.5	106.3	104.8	98.1
Export sales stabilization	0.6	(12.9)	28.5	(13.1)	(12.5)
Generation equalization	7.9	(10.3)	(39.2)	(3.2)	(2.3)
Goodwill	0.0	0.0	(0.1)	0.1	0.0
Net income	1.1	25.1	8.4	26.2	47.6
Interest coverage ratio (1)	1.00X	1.10X	1.04X	1.14X	1.25X

## BALANCE SHEET INFORMATION (IN-\$MILLIONS)

	March 31st 1993	1992	1991	1990	1989
Assets					
Net fixed assets	3,696.5	3,302.0	2,821.3	2,456.1	2,388.9
Current assets	328.5	316.2	225.1	216.8	235.8
Deferred charges	103.7	158.3	144.2	163.7	106.3
Total assets	4,128.7	3,776.5	3,190.6	2,836.6	2,731.0
Liabilities					
Long-term debt	3,047.6	2,342.5	1,930.8	1,731.0	1,813.4
Current Liabilities	293.2	545.8	451.6	334.3	277.1
Deferred liabilities	379.7	465.1	410.1	381.7	277.1
Equity	408.2	423.1	398.1	389.6	363.4
Total liabilities and equit	y 4,128.7	3,776.5	3,190.6	2,836.6	2,731.0
Debt ratio (2)	88.69%	86.62%	85.29%	83.73%	84.40%

#### Notes:

- (1) Interest coverage ratio = (net income + interest expense income from sinking funds and other investments)/
  (interest expense income from sinking funds and other investments)
- (2) Debt ratio = debt/debt + equity, where debt = Long-term debt + short-term indebtedness cash and short-term investments + irradiated fuel management, nuclear unit decommissioning (net of related deferred charge) and fuel channel removal + unfunded pension obligation (note 8)

# FINANCIAL STATISTICS

Fiscal Year	1992-93	1991-92	1990-91	1989-90	1988-89
Energy costs (in \$millions)					
Total cost of energy generated and					
purchased (gross)					
Hydro	0.0	0.0	0.0	0.0	0.0
Thermal	170.2	150.8	173.8	240.6	165.6
Nuclear	14.4	16.5	17.4	17.1	22.2
Diesel	0.9	2.0	0.1	0.9	0.2
Purchases	80.9	123.0	113.8	109.5	86.3
Total	266.4	292.3	305.1	368.1	274.3
Finance costs (in \$millions)	045.0	909 =	071.0	0445	040.0
Interest expense	345.6	303.7	271.8	244.5	242.3
Income from sinking fund and other	(FF C)	(00.0)	(07.0)	, pp p,	(*0.0
investments	(55.6)	(63.9)	(67.6)	(55.5)	(50.0
Provincial government guarantee fee	16.6	13.8	12.0	9.0	10.0
Amortization of debenture discount	3.3	3.4	2.6	2.3	3.1
Amortization of unrealized foreign exchange	15.9	(3.3)	15.9	3.9	(1.2
Interest capitalized	(80.3)	(54.0)	(23.1)	(6.7)	(3.8
Net financial expense	245.4	199.7	211.6	197.5	200.4
Other statistics					
Rate increase	5.00%*	-2.30%	6.90%**	0.00%	0.00%
CPI (New Brunswick)	0.60%	6.50%	4.60%	4.70%	3.60%
GDP increases (New Brunswick)	1.00%	-0.80%	0.10%	2.00%	3.20%
Capital expenditures (millions)	\$523.3	\$544.2	\$463.6	\$163.2	\$120.1
Change in total debt (millions)					
(net of sinking funds, cash and					
investments)	\$438.7	\$402.0	\$279.3	\$6.2	\$(118.7
% Break-down of long term debt:					
Canadian dollar	71%	70%	59%	63%	61%
U.S dollar	29%	26%	33%	28%	31%
Swiss franc	0%	4%	8%	9%	8%
Weighted average interest rate	9.47%	9.68%	9.50%	9.53%	9.53%

<sup>\*</sup> effective October 1, 1992

<sup>\*\*</sup> effective January 16, 1991

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