

Annual Report 1999 all our energy, for

We are a leading producer of green energy and a major North American distributor. We offer our customers energy services either directly or through our subsidiaries, our TransÉnergie division, or companies in which we have a stake. We meet the needs of our Québec customers first. We also deliver power to some 15 electric utilities in the Northeastern United States, Ontario and New Brunswick. Since we obtained our power marketer license, we have been selling electricity on the American wholesale market. We have a single shareholder, the Québec government.

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Answering the electricity needs of our Québec customers is the main focus of our activities. We work tirelessly to meet those needs and remain competitive, while improving our profitability. We do everything possible to offer our Québec customers the benefit of stable rates that are among the lowest in North America.

We have always made high-quality customer service our top priority. We do our utmost to learn the expectations of each category of customers and to improve our service accordingly. And we make use of cutting-edge technologies to continually increase our efficiency.

## high-quality service

3.5 million customer accounts low, stable electricity rates personalized service



# a reliable system

32,000 kilometres of transmission lines 106,000 kilometres of distribution lines

Our most important job is to supply electricity to all our customers at all times and under all circumstances. That's why we keep our transmission system, the largest in North America, in good repair. To handle the rigors of the Québec climate even better, we have undertaken several loop and reinforcement projects. Our system meets the standards of the Northeast Power Coordinating Council.



We are improving our efficiency to increase profitability. We manage our operating expenses carefully so we can pay our shareholder growing dividends. Through our capital program, we ensure the continued reliability of our facilities. Integrated business risk management enables us to anticipate change better and to react quickly.

\$9.6 billion in sales \$56.8 billion in assets

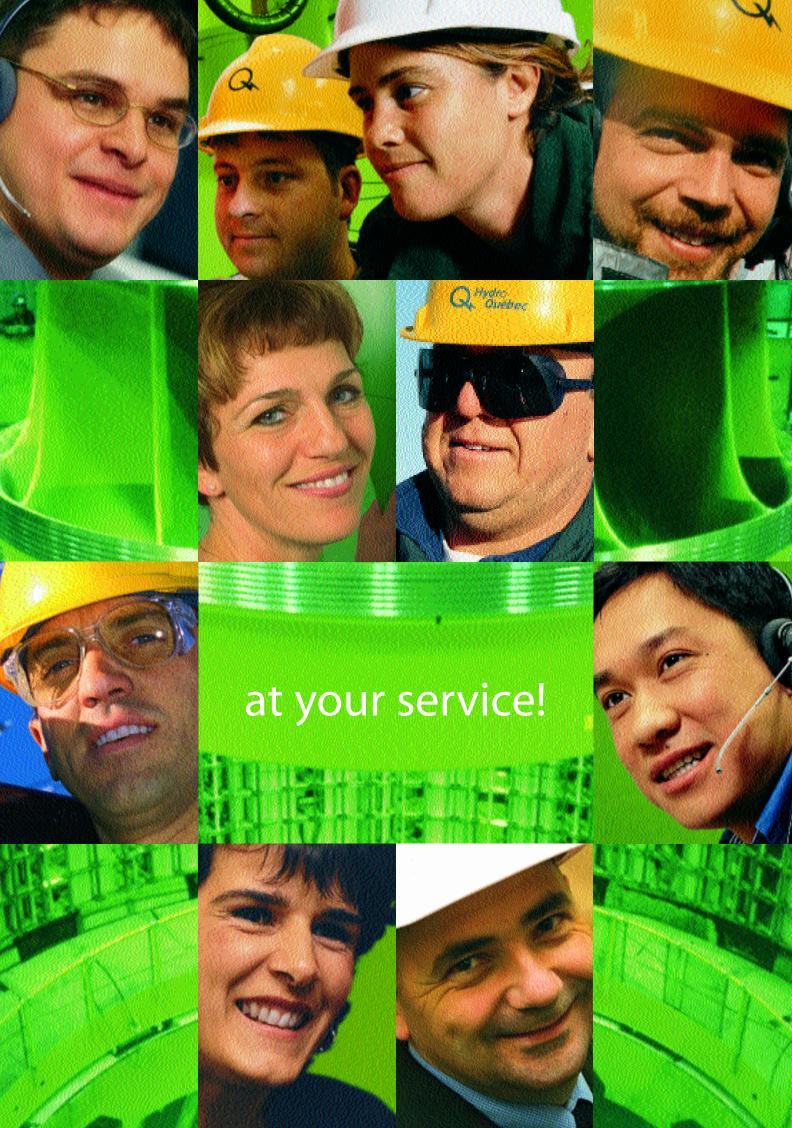
# efficient management



### 19,135 employees throughout Québec

## competent personnel

Our employees are the key to the quality of our customer service. Together, management and employees offer a winning combination of knowledge, experience and innovative spirit that helps make Hydro-Québec a leader in its field. Over the years, we have built up knowhow that is recognized worldwide, and we continuously develop the technical skills of our employees so they can contribute fully to the company's growth.



20,100 jobs sustained by our operating activities 12,500 jobs sustained by our capital investments \$1.5 billion in annual purchases from our suppliers

# profitable partnerships

We rely on productive partnerships to achieve our growth targets. We are working with local communities to develop more of the profitable hydroelectric potential in Québec. We market some of our technologies in cooperation with local and international companies. We use a partnership approach for many of our investments and projects abroad. Each alliance adds to our know-how, diversifies our business risks, and increases our expertise and that of our partners.



As a major player on the economic scene, we are called upon to contribute to the development of the society in which we operate. We support organizations that work to improve the well-being of the community as a whole. Through our donations, we encourage numerous projects in the spheres of education and health. Through our sponsorships, we contribute to a great many cultural, sports, environmental and social activities.

# an important social role

donations and sponsorships in all regions \$3.2 million to Centraide/United Way

Some 50 employees performed Molière's *The Imaginary Invalid* and donated the proceeds to Centraide.



# it's for you, and it's good business

just look at the numbers ...



### **Financial Highlights**

### **Operations and dividends**

Revenue **Net income Dividends** 

(\$M)

### **Balance sheet**

**Total assets** Long-term debt Shareholder's equity

### **Cash flows**

**Operating activities Investing activities Financing activities** Cash and cash equivalents at end of year

### Ratios (%)

**Return on equity Return on revenue Capitalization Self-financing** 

1999	1998	Change (%)
9,579	8,812	9
906	679	33
453	279	62
56,785	57,295	-1
35,961	37,623	-4
13,741	13,288	3
2,884	2,225	30
(2,227)	(2,277)	2
(590)	(12)	_
100	33	203
6.7	5.2	29
9.5	7.7	23
26.2	25.0	5
59.5	50.2	19

### **Net Income** and Return on Equity



This year's performance offsets the downturn experienced in 1998, which was marked by two exceptional weather events. Our net income, up 33%, has topped the \$900 million mark. Our return on equity has risen along with our profitability and stands at 7%. We are on course toward the financial targets set in our Strategic Plan2000-2004.

### **Sales**



Sales are up 9% to more than \$9 billion in 1999. The sustained growth seen in the past years stems from increased electricity sales in Québec and on export markets, as well as from diversification of our activities. For the 2000-2004 period, we anticipate that the further rise in sales will be driven mainly by electricity sales.

### **Dividends Paid** and Capitalization



Since 1997, we have paid dividends of \$1.1 billion to our shareholder, the Québec government. Our improved financial position translates into higher capitalization, which is a condition for the payment of dividends. We maintain our objective of achieving greater returns for our shareholder and Québec society as a whole.

In 1999, Hydro-Québec made solid progress toward achieving the objectives set out in its Strategic Plan 1998-2002.

THE CUSTOMER FIRST In operations, Hydro-Québec fulfilled its primary mission by providing Québec customers with all the electricity they required at competitive rates.

Practically all electricity needs were met by energy generated from water resources. Hydro-Québec also optimized its sales revenue by conducting short-term transactions on markets outside Québec. On all markets, the company posted total sales of 171 TWh, with Québec sales accounting for 86%.

Major efforts were undertaken to improve the reliability of power supply for all our customers. A total of \$139 million was allocated to a variety of projects to reinforce the transmission system in areas with a high risk of ice accumulation. Improvements to increase the security of power supply to downtown Montréal were partially completed, and work to strengthen power supply to downtown Québec City and the Mauricie region got under way. We resumed the authorization process for loop projects in the Montérégie region and the Outaouais (Ottawa Valley), and the construction of an interconnection with Ontario. These projects will help speed up service restoration in the event of a major power failure.

In electricity generation, Hydro-Québec passed some important milestones in 1999 in its project to complete the development of Québec's hydropower potential in response to growing demand for electricity from Québec customers. Hydroelectric generation remains the method of choice, because of its competitive cost of development and operation and its many environmental advantages, in particular its major contribution to reducing greenhouse gas emissions.

Hydro-Québec signed a shareholders' agreement with Newfoundland and Labrador Hydro concerning the jointly owned Churchill Falls (Labrador) Corporation [CF(L)Co]. This agreement defines the corporate governance rules applicable to CF(L)Co, which will continue to sell Hydro-Québec most of the output from the 5,428-MW Churchill Falls power plant until 2041. It further ensures the ongoing reliability of the facilities and the financial stability of CF(L)Co. As well, Hydro-Québec signed a contract to buy an additional 682 MW of firm power in winter from Churchill Falls power plant, also until 2041.

Hydro-Québec continued work on the refurbishing program designed to extend the useful life of certain generating stations, including Beauharnois. Construction of Sainte-Marguerite-3 generating station moved ahead, and preliminary work on Grand-Mère generating station is well under way. With regard to the Churchill River hydropower development, we maintained a dialogue with all partners to ensure the best possible outcome for the project.

Sept-Chutes and Chute-Bell generating stations, which had not been operated for some 15 years, were recommissioned. The local communities participated in the rehabilitation work through limited partnerships, which allow the communities to benefit from the economic spinoffs of their association with Hydro-Québec.

WIN-WIN AGREEMENTS One of the highlights of 1999 was the signing of innovative partnership agreements between Hydro-Québec, the Essipit and Betsiamites Montagnais band councils, and the regional county municipalities of Fjord-du-Saguenay, Haute-Côte-Nord, Manicouagan, and Maria-Chapdelaine. The agreements concern the partial diversion of the Portneuf, Manouane and Sault aux Cochons rivers toward Bersimis-1 and Bersimis-2 generating stations, and the construction of a 440-MW generating station on the Toulnustouc. Hydro-Québec signed a further agreement with the Betsiamites community, intended to provided added value for the host communities by restoring the salmon population in the Rivière Betsiamites.

These agreements, which enjoy broad local support, promise substantial economic spinoffs for all partners. They reflect the soundness and feasibility of the new business partnership approach we have adopted with local communities in Québec when building new hydroelectric projects. They also demonstrate the advantages afforded our partners, who will also participate in the construction work according to formulas tailored to their needs.

SEIZING BUSINESS OPPORTUNITIES We have instituted a new approach to innovation management, based on increasing the synergy between our operating units, research divisions, the unit responsible for commercializing the products of Hydro-Québec research, and our venture capital and technology marketing subsidiaries. One of our subsidiaries, Hydro-Québec CapiTech, has overhauled its investment policy to target companies whose products and services are likely to facilitate the development of our activities or improve the performance of our business units. Further, through its investments in international venture capital funds, Hydro-Québec CapiTech is now in a position to ride the wave of technological innovations in the energy market.

Our international operations have been reorganized to focus on areas in which Hydro-Québec has particular competence and to make greater use of our business units' expertise, while generating valuable economic spinoffs for investors and Québec companies. Our business development undertakings are mainly in China and certain targeted countries in Latin America and Africa, in partnership with both international and Québec-based investors and companies.

In response to market deregulation in North America, Hydro-Québec has initiated R&D projects designed to increase the capacity of TransÉnergie's transmission system.

Finally, Hydro-Québec will ensure the continuity of know-how within its ranks and in Québec companies by participating in the development of the North American electricity industry, especially in the area of highvoltage transmission, where its expertise is widely recognized.

POSITIVE RESULTS The results achieved in 1999 confirm the validity of the company's strategic orientations, the quality of its management, and the soundness of the decisions made during the year. Hydro-Québec posted net income of \$906 million at year-end, up 33.4% over the preceding year, which was affected by extreme weather conditions.

These profits stem partly from a 3.5% increase in sales in Québec, where strong economic growth contributed to rising demand. They are also the result of an increase in purchase/resale transactions on the American market. Hydro-Québec's vast reservoirs offer a unique competitive edge, allowing the company to take advantage of price volatility on the power market in the Northeastern United States by purchasing electricity at low prices in off-peak periods and reselling it at higher prices during peak times.

A total of \$453 million, or half of earnings, will be paid to the Québec government in the form of dividends, while the remainder will be reinvested in the company, mainly to improve customer services.

Hydro-Québec continued to play an important role in Québec's economic growth through its operating activities, capital spending and purchases of goods and services. In 1999, it helped sustain 32,600 person-years of employment throughout Québec, and its purchases from suppliers totaled \$1.5 billion.

LOOKING AHEAD TO 2000-2004 In 1999, Hydro-Québec updated its strategic plan in light of the changing business environment and fine-tuned some of the orientations. Continuing the emphasis of previous years, the Strategic Plan 2000-2004 confirms that improving customer service remains the top priority.

Hydro-Québec plans to pay particular attention to meeting the expectations expressed by each category of customers, in part through better communications and by offering them an enhanced range of services.

In the residential sector, for example, we will provide service guarantees to customers for high-priority work such as connection to the distribution system, along with more flexible billing and payment options.

Business customers will be offered one-stop access to Hydro-Québec services (for companies with more than one location), as well as programs for replacing or expanding their electrical equipment. In the near future, we plan to provide all our customers with access to services over the Internet.

To improve customer communications and speed up emergency interventions, we ratified a draft agreement with two associations of Québec municipalities, the Union des municipalités du Québec and the Fédération québécoise des municipalités locales et régionales, establishing permanent mechanisms for exchange and consultation, similar to the committee set up in 1996 with the Union des producteurs agricoles-UPA (Québec farmers' association).

We also revised the Hydro-Québec-UPA agreement on the siting of transmission lines on farms and in woodlands.

In addition, Hydro-Québec reiterated its commitment to maintain the rate freeze until April 2002. The company plans to pass on the benefits of its robust financial health to its customers by striving to stabilize rates until 2004. It should achieve this goal through market growth and reduced financial expenses.

In view of the business potential offered by the gas industry, particularly in Eastern Canada, last fall Hydro-Québec formed a new business unit for the Natural Gas Sector. The primary mission of this new business unit is to ensure a major targeted presence in this market in order to seize promising opportunities, in cooperation with our partners. The Natural Gas Sector business unit is also responsible for managing our stake in Noverco, which controls a number of companies involved principally in the pipelining and distribution of natural gas.

In its Strategic Plan 2000-2004, Hydro-Québec undertakes to offer a rising rate of return to its shareholder. We expect our return on equity to increase from 6.7% in 1999 to 9.8% in 2004 - a level closer to the industry average.

Hydro-Québec intends to ensure profitable growth in its operations so as to continue contributing to Québec's economic development. Much of this growth is based on completing the development of Québec's hydroelectric potential, which will enable the company to meet long-term demand in the Québec energy market under competitive conditions. Hydro-Québec will also continue its activities in short-term electricity markets in order to make the most of the new opportunities created by industry restructuring, particularly in the area of purchase/resale transactions.

LAYING THE GROUNDWORK FOR THE FUTURE In the labor relations sphere, Hydro-Québec signed five-year agreements with its engineers, technicians, trades, and office and clerical employees. These agreements open up promising avenues. We also revised the total compensation package for other employees, to make it more motivating and competitive. The introduction of an incentive pay plan linked to attainment of the business plan objectives creates favorable conditions for the company's growth, especially since our development depends largely on the expertise of our employees, their energy and their ability to adapt to change.

To ensure the continued development of its know-how, Hydro-Québec will ensure that the skills of its work force continue to advance. The company plans to hire some 1,500 new employees to offset attrition in the coming years, including a large number of young graduates with university or technical training in strategic fields.

In closing out the year, we wish to thank the members of the Board of Directors for their contribution. And we once again express our confidence in the commitment and professionalism of our employees, who remain the key to our growth and profitability. We are counting on them to achieve our primary objective: customer satisfaction.

As we embark upon the third millennium after more than 55 years of growth, Hydro-Québec is better able than ever to fulfill its mandate to its Québec customers and to fully play its role as an economic lever. By fostering its own growth over the coming decades, it thereby contributes to the growth of Québec society as a whole.

L. Jacques Ménard

**Chairman of the Board** 

**President and Chief Executive Officer** 

(ludu Paille."

### listening to our customers

MEETING EXPECTATIONS Customer satisfaction is the primary objective of Hydro-Québec's Strategic Plan 2000-2004.

In addition to projects and activities to strengthen the transmission system, we moved forward with our program to reinforce the distribution system and reduce the number and duration of outages. In 1999 we completed the first stage, which involved revising system design standards and adjusting engineering practices to bring them in line with these new standards. The \$175-million program will be implemented over three years.

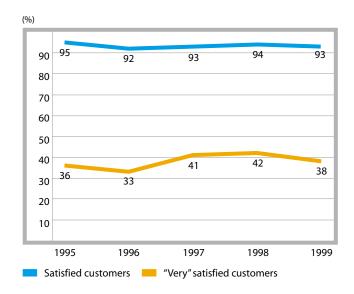
Service continuity improved considerably over the year, with an average service interruption of 2.81 hours per customer, excluding outages due to extreme weather conditions. To handle such conditions better, we took steps to speed up diagnostics in the event of a major power failure. Steppedup tree pruning also played a large part in the improvement shown, as vegetation is the cause of approximately 40% of distribution outages. Our target is to reduce the average duration of service interruptions to 2.35 hours per customer by 2004.

With some 100,000 new radio-frequency meters, we are able to take more regular readings of consumption by customers whose meters are hard to reach.

EFFECTIVE COMMUNICATIONS TOOLS Deployment continued on the HydroDirect customer call centre as new locations were added in Montréal and Saint-Antoine, joining the first centre in Saint-Hyacinthe. The call centre will enable us to offer faster, better-quality service to all customers. A site was opened in Hull, as well, to meet the specific needs of our business customers.

We also established a one-stop facility for municipalities in the Laurentides, Montmorency and Richelieu territories, to provide priority communication links in emergency situations. Following violent storms in July, we instituted a new communication procedure that allows us to convey more precise information on service-restoration times. We plan to gradually extend this procedure, which helps emergency responders and municipal elected officials obtain information more quickly when such events occur.

### **Customer Satisfaction**



We have begun to use the Internet, in particular for information concerning moves and new connections and to allow customers to send in their own meter readings. Our customers can also register by Internet for our equalized payments plan or payment by pre-authorized bank debit. We plan to make increasing use of electronic commerce to serve our customers better.

MORE FLEXIBLE PAYMENT OPTIONS We continued our efforts to reduce the number of unpaid bills. At the end of 1999, the total number of outstanding accounts was down nearly 25% from the preceding year.

Our collection methods are more stringent, yet at the same time offer more flexibility - such as payment agreements - to customers experiencing financial difficulties. In addition, we initiated a pilot project with 560 low-income customers in Montréal and Shawinigan to help them reduce their electricity bills and acquire good payment habits at the same time. It responds to two frequently expressed expectations: for the company to treat all its customers fairly, and for it to be flexible in its dealings with customers in difficulty.

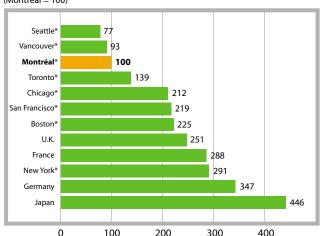
A TOOL FOR PROFITABILITY The activities of our sales force in all regions allowed us to surpass our sales targets by 30%, and a reduction of nearly 16% in the unit cost of meter-reading helped improve our productivity.

In 1999, we continued to offer our residential customers a variety of programs to improve comfort while optimizing their electricity consumption. Among other activities, we rented out 12,700 new water heaters, bringing the total number of rentals to 149,000. We also sold more than 110,000 electronic thermostats, which offer our customers increased comfort.

Also of key importance was the technical assistance we provide to business customers by offering them products and services tailored to their needs. We offer electrotechnology implementation assistance, a service that helps maximize their productivity and energy performance. We also made gains in the restaurant market for electric cooking appliances.

### Comparative Index of Electricity Prices Residential Customers — January 1, 1999



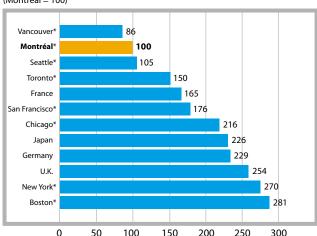


Monthly bill (taxes included) for a consumption of 625 kWh

Sources: Hydro-Québec, Comparison of Electricity Prices in Major North American Cities at May 1, 1999. Electricity Association, International Electricity Prices at January 1, 1999.

### **Comparative Index of Electricity Prices** Industrial Customers — January 1, 1999

(Montréal = 100)



Monthly bill (taxes included) for a demand of 10 MW, a consumption of 5,760 MWh and a load factor of 80%

Sources: Hydro-Québec, Comparison of Electricity Prices in Major North American Cities at May 1, 1999. Electricity Association, International Electricity Prices at January 1, 1999.

<sup>\*</sup> At May 1, 1999.

<sup>\*</sup> At May 1, 1999.

Hydro-Québec's research institute IREQ, ABB, and the Québec energy transmission innovation centre (CITEQ) have developed a solidinsulation transformer that can be installed directly in the ground.

Major supply contracts were signed in 1999: with Magnola Metallurgy, for 120 MW of power with an option to increase it to 240 MW; with mining company IOC for 75 MW of power; and with Silicium Bécancour for 85 MW of power.

In addition to rental and maintenance, in 1999 Hydro-Québec began selling water heaters.



Two initial collection centres have been opened: one for the residential sector, in Joliette, and one for the business sector. in Montréal. As well, a first Hydro*Direct* site devoted to business customers throughout Québec was set up in Hull.

Hydro-Québec signed an agreement with the Union des municipalités du Québec and the Fédération québécoise des municipalités locales et régionales designed to facilitate the exchange of information about common problems, in order to manage outages better and speed up implementation of effective emergency measures.

INDUSTRIAL DEVELOPMENT We pursued our efforts, in partnership with Investissement Québec and the Société générale de financement du Québec, to promote the location or expansion in Québec of large industries for which low rates and the reliability and quality of power supply are major drawing cards.

During the past year, we worked to advance important projects in cutting-edge fields, in particular material manufacturing for high-technology and telecommunications companies. We also lent our support to projects for expanding, protecting or reopening more conventional industrial facilities.

In the metallurgical industry, we contributed to diversification projects by certain Québec producers of ferroalloys. We also took part in other projects in the fields of biofermentation and biotechnology, and played a major role in securing a world contract for producing fluorescents using a new technology by a company already established in Québec. And we were associated with the creation of a worldwide centre of expertise in Montréal for Trent gas turbine manufacturing.

We formed closer ties with our large-power customers, as well, and held meetings, for the eleventh year in a row, to discuss various subjects and learn more about their needs and expectations.

### meeting Québec demand

With its own generating output and its purchase agreements, Hydro-Québec provides a reliable power supply, on favorable terms, to all its Québec customers. In 1999, it continued to operate its generating facilities at an optimum level. These include 80 power stations that generate 143 TWh, 93% from water sources. In 1999, generating output and purchases totaled 188 TWh.

Security of supply for the Québec market is a crucial aspect of the company's service quality. Hydro-Québec manages its generation using stringent criteria in line with the best industry practices. It is therefore sure to have a sufficient energy reserve at all times to counteract extreme conditions, namely a possible runoff deficit of 64 TWh over two consecutive years. The probability of such a deficit is less than 2%.

The capacity reserve satisfies the reliability criterion of 2.4 hours per year in load-shedding risk, in keeping with the standards adhered to by all North American power producers, including those who are members of the Northeast Power Coordinating Council, like Hydro-Québec.

**GENERATING FACILITIES The continued reliability of** our generating facilities is a key factor in our ability to meet customer demand in Québec. In 1999, we refurbished and upgraded some generating stations to extend their useful life. Bersimis-1, La Gabelle, Shawinigan-2, Shawinigan-3, La Tuque, Manic-2 and Beauharnois underwent rehabilitation, while major repairs were made to two of the four generating units at Tracy thermal power plant.

Sept-Chutes and Chute-Bell generating stations, which had not operated for some 15 years, were restored and recommissioned. These rehabilitation projects were carried out under limited partnerships with the local communities, in a concrete illustration of the new local partnership approach favored by Hydro-Québec.

The Atomic Energy Control Board issued an unrestricted operating permit expiring October 31, 2000, for Gentilly-2 nuclear power plant.



All year long, the company carefully complied with dam safety standards to prevent the presence and operation of hydroelectric facilities from having any undesirable consequences for either the public or the environment. These standards are comparable to industry norms and comply with the rules of the International Commission on Large Dams.

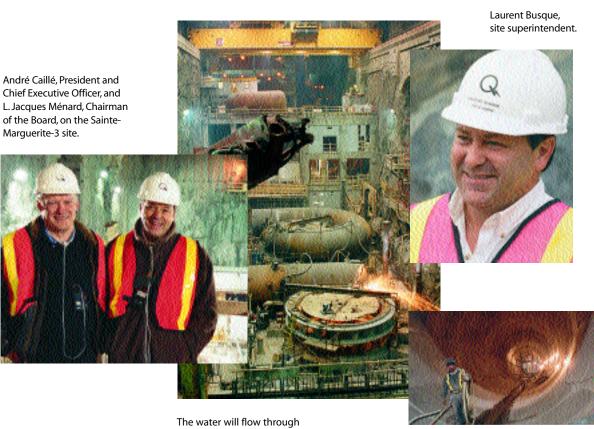
### CONSTRUCTION OF SAINTE-MARGUERITE-3

As a result of careful facility design and optimum project management, commissioning of Sainte-Marguerite-3 generating station, scheduled for fall 2001, will be moved up by several months.

One of the project's unique characteristics is its head, which is equivalent to seven times the height of Niagara Falls. When commissioned, the new station will add 882 MW of power and 2.8 TWh of annual generating output to Hydro-Québec's facilities.

The development of Sainte-Marguerite-3 generating station allowed a large number of local and regional companies to benefit from economic spinoffs estimated at nearly \$500 million. Workers from the region made up 69% of the total work force.

Optimizing Québec's hydroelectric potential is beneficial, both economically and environmentally, for the communities concerned as well as for all Québec society.



the penstocks and surge into these huge spiral casings to drive the turbine blades in the centre. The power station will have two 441-MW generating units, the most powerful in the Hydro-Québec system.

View of a penstock.

PARTNERSHIP, A KEY TO DEVELOPMENT In 1999,

Hydro-Québec pursued its objective of developing profitable hydroelectric potential in Québec and in neighboring regions. Such developments are intended primarily to ensure longerterm supply for a growing Québec market, under competitive conditions for customers, and in a way that is profitable for the company.

The agreements signed with the Betsiamites Montagnais band council, the Essipit Montagnais band council and several regional county municipalities on the North Shore and in the Saguenay region mark a major turning point. These projects - concrete examples of Hydro-Québec's partnership approach for new hydroelectric facilities in Québec will cost more than \$700 million and will generate nearly 3 TWh of energy. Similar partnership agreements were also signed in connection with the refurbishing projects at Sept-Chutes and Chute-Bell generating stations.

In 1999, consultations proceeded with local communities that are prospective partners in projects such as the partial diversion of the Romaine River for the Lower Churchill development in Labrador, and the construction of Eastmain-1 generating station, to be combined with the partial diversion of the Rupert on the territory covered by the James Bay and Northern Québec Agreement.



The establishment of a development fund as part of the Toulnustouc project "...[illustrates] the advantages of an equitable partnership with Hydro-Québec, serves the partners' common interests and enriches the heritage of generations to come." — Georges-Henri Gagné, Reeve, Manicouagan Regional County Municipality.



Hydro-Québec recommissioned Sept-Chutes generating station, near Mont Sainte-Anne. Built in 1916, this facility attracts some 40,000 visitors every year because of its historical interest. Here, Ghislain Ouellet, Vice President -Operation of Generating Facilities, announces the formation of a limited partnership in a press conference with Germain Tremblay, Mayor of Saint-Ferréol-les-Neiges.

The signing of a business partnership agreement for the partial diversion of the Portneuf, Manouane and Sault aux Cochons rivers and for the construction of Toulnustouc generating station "...will lead to the creation of a great many jobs, the formation of new companies, the restoration of one of the finest salmon rivers in Innu-Montagnais ancestral lands, and major developments that will have an impact on traditional hunting, fishing and trapping activities." — René Simon, Chief, **Betsiamites Montagnais** Band Council.



Hvdro-Ouébec and the regional county municipalities of Fjord-du-Saguenay, Haute-Côte-Nord, Manicouagan and Maria-Chapdelaine signed an agreement establishing a limited partnership for hydroelectric projects on the North Shore.

## a stronger transmission system

The role of TransÉnergie is to meet customer demand efficiently and effectively at all times. With this in mind, the division continued its work to loop the high-voltage system for greater security of supply to regions that have historically had the most exposure to extreme weather conditions.

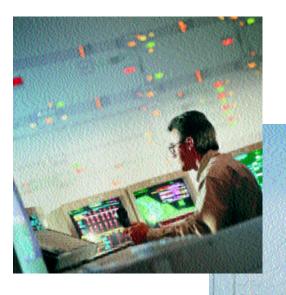
The first stage in the downtown Montréal loop was completed with the construction of an underground link between Atwater and Hadley substations, along with a 315-kV line (initially operated at 120 kV) connecting Aqueduc and Atwater substations. Transmission capacity between Beauharnois power station and downtown Montréal was also increased by 75%.

We concluded the first stage in the project to improve security of supply to downtown Québec City by adding

a transformer to the city's substation in order to loop the 315-kV and 230-kV systems. To secure supply to the Gaspé region, we began draft design studies on a 161-kV loop line.

Work on the first stage of the Montérégie loop was completed, as well. This project involved building 100 km of 735-kV line to connect Des Cantons and Saint-Césaire substations. In an emergency, this section could be brought on line within a few hours and operated at 230 kV.

Lastly, new studies got under way on the remaining stages in the Montérégie loop, the Outaouais loop and the planned interconnection with Ontario. We met with the main stakeholders in these regions to determine the route with the least impact in each case.



In 1999, Hydro-Québec modernized its system control centre in Montréal.

Loop and system reinforcement projects are designed to improve security of supply for all our customers.

> In 1999, we completed a 7-km line on tubular steel poles to connect Aqueduc and Atwater substations. Once finished, the Montréal region loop will add 1,000 MW in transmission capacity to the system that supplies downtown.

### **ENSURING CONTINUED SYSTEM RELIABILITY**

Because of the aging of some of our facilities, we have initiated an asset management plan designed to ensure system reliability and also to extend the useful life of certain facilities. In 1999, we invested nearly \$205 million to replace parts of the system or to modernize facilities such as the system control centre, as well as Beauharnois, Bersimis-1 and La Tuque sending-end substations.

Wherever conditions are appropriate, we started to employ a thermal de-icing method that uses the Joule effect to prevent ice from accumulating on conductors. At the same time, we continued our research to improve ways of preventing major power failures and of restoring service quickly in the event such failures do occur.

BEYOND OUR BORDERS Throughout the year, TransÉnergie sought out the best business opportunities in energy transmission, both in North America and on other continents. We coordinate our international activities in order to market our know-how in areas related to high-voltage system operation.

In 1999, the load factor of our interconnections with neighboring systems was up 23% from last year.

In the research field, we increased efforts to optimize the use of our interconnections for both exports and imports of electricity, keeping in mind that security of supply depends as well on improved access to neighboring systems' resources.

We are also working to market technologies developed by our strategic subsidiaries Teqsim International and Trans-Énergie Technologies.



In Australia, TransÉnergie began work on a 67-km interconnection using new high-voltage, directcurrent technology. It is also involved in building a 600-km interconnection in Peru.

### environment

A FORMAL COMMITMENT Throughout 1999, Hydro-Québec continued to promote the responsible use of the resources it manages. Since 1994, the company has devoted an average of \$90 million annually, or nearly 2% of our total operating expenses, to environmental protection and enhancement.

In addition to measures for attenuating the environmental impacts of our construction projects, we signed a number of agreements with host communities. The goal of these agreements is to provide a framework for projects and studies, establish forms of participation by Aboriginal or other local communities and assure them of long-term income once the facilities are in operation.

REDUCING GREENHOUSE GASES In accordance with our strategic plan, we continued to favor the use of hydroelectricity to meet our customers' needs. This source of renewable energy helps substantially reduce greenhouse gas emissions, one of the most important environmental issues today. Québec's greenhouse gas emission level is significantly lower than that of Canada as a whole; this excellent performance is mainly attributable to the use of water to produce electricity.

In view of these results, we asked the managers of Éco-GESte, a program set up by the Québec government, to recognize the carbon dioxide (CO2) emissions avoided as a result of our investments in new hydroelectric generation projects since 1990 and our purchases of wind and hydro power from private producers. This program will provide credits that can later be sold to companies or provinces experiencing difficulty complying with the CO<sub>2</sub> emission reduction targets set in the Kyoto Protocol.



The introduction of environmental management systems on the ISO 14001 model confirms Hydro-Québec's desire to make environmental protection an essential component of its long-term growth objectives.

CONCRETE ACTION Hydro-Québec has implemented an action plan intended to provide systematic, proactive management of substances that deplete the ozone layer. This plan calls for gradually eliminating these substances and replacing them with products with little or no environmental impact. It also provides for the systematic recovery of various types of equipment removed from service.

The desire to protect our resources takes concrete form in the pursuit and development of systematic recovery activities to maximize the reuse and recycling of waste material. In 1999, these activities generated more than \$9 million in gross income and led to substantial savings. We recycled and reused metals, transformers, batteries, electrical equipment, printer cartridges, hundreds of thousands of litres of insulating oil and hundreds of tonnes of paper. We repaired, reused and recycled thousands of wood poles, and reclaimed more than 22 tonnes of waste from non-recyclable poles.

We also negotiated an agreement with Québec's Ministère de l'Environnement and the Société de la faune et des parcs du Québec (wildlife and parks association) concerning biodiversity protection on all our properties.

On the international scene, the World Commission on Dams invited us to join its Operations Steering Committee. We also actively participate in organizations that enable us to promote the environmental qualities of hydroelectricity, such as the Canadian Hydropower Association, the International Energy Agency, the World Commission on Dams and the Canadian Electricity Association.

On December 21, the company's first unit earned ISO 14001 certification for its environmental management system.



To improve fishing conditions in the area of Sainte-Marguerite-3 generating station, Hydro-Québec built spawning grounds and stocked some lakes with fish.

gases from large hydropower reservoirs are 29 times lower than emissions produced by oil-fired power plants, 34 times less than those of coal-fired plants and 18 times less than those of natural gas combined-cycle facilities.

### added value through innovation

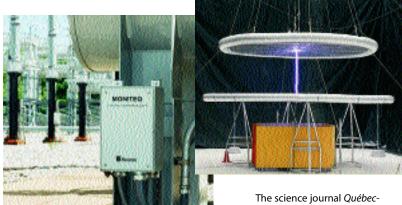
R&D, A STRATEGIC ACTIVITY Technological innovation is an economic issue of prime importance to Hydro-Québec. It has a crucial impact on the efficiency of our business units and allows us to maintain our competitive edge. In addition, some technologies developed for our own needs offer marketing potential that can enhance our long-term financial performance.

After carefully reassessing our R&D operations and refocusing them on core activities, in 1999 we began setting up the necessary mechanisms to manage innovation better.

To this end, we formed multidisciplinary teams in the strategic sectors of generation, transmission and distribution as well as in customer services and large-power customer services. In each of these sectors, we determined the fields of research that will allow us to improve the reliability of our power supply, increase security of supply for our customers, boost energy efficiency and optimize the use of our facilities.

### FROM THE LABORATORY TO THE MARKETPLACE

To maximize the impact of our R&D investments, we established a Commercialization of Technology unit to exploit the innovations developed by Hydro-Québec. Right from the start of the technological innovation process, this unit offers its expertise and technical support to multidisciplinary teams to help them evaluate R&D projects on the basis of the company's strategic objectives and each project's cost, timeframe, and technical feasibility. It is also in charge of verifying the potential gains resulting from the application of these technologies so as to facilitate their implementation in the units concerned and, if appropriate, promote their marketing in cooperation with outside partners.



Since December 1999, Hydro-Ouébec CapiTech has been a shareholder in Snemo, a Brossard company that designs and manufactures control, monitoring and protection devices for highvoltage and ultra-high-voltage electrical equipment.

Science recognized the work of a team of scientists from Hydro-Québec's research institute IREQ, who are working with the Institut national de la recherche scientifique (INRS) to develop a new laser technique for triggering lightning. This technique could be used to set off lightning in order to divert its path.

For its part, Business Development and Affiliates helps business units obtain and manage patents and administer licenses awarded to companies that market the innovations and products developed by Hydro-Québec. To achieve optimum profitability, it also manages Hydro-Québec's interest in its subsidiaries and other corporate entities such as Hydro-Québec CapiTech, ACEP, and Énergie Capital Innovation.

INVESTING IN TECHNOLOGY In 1998, we conducted a major overhaul of Hydro-Québec CapiTech, the holding company that previously managed our technological subsidiaries, and made it a venture capital company in the energy field. In 1999, we again reassessed its investment policy to bring it in line with CapiTech's new status as a venture capital company.

Using strict selection criteria, we continued to build a portfolio of investments in start-up or growth companies that are likely to generate spinoffs in strategic sectors for Hydro-Québec.

Hydro-Québec CapiTech also entered the U.S. market by investing in venture capital funds such as Nth Power Technologies and EnerTech Capital Partners II.

Apart from the financial spinoffs they generate, our investments in foreign venture capital funds allow us to monitor technological developments and afford further opportunities to invest in companies that fit our criteria. We are consequently better able to identify truly innovative technologies and target business opportunities that may be profitably exploited by our business units.

Over the years, Hydro-Québec has played a key role in technological innovation, especially in hydroelectric generation and high-voltage transmission.



In 1999, Hydro-Québec CapiTech became a partner of Électro Composites, a Saint-Jérôme company that designs and manufactures insulators for electrical and industrial equipment companies.

### a market without borders

### PROFITABLE INTERNATIONAL ACTIVITIES

In 1999, we entered a new stage in the development of a profitable international activity base fostering the company's growth over the medium and long term. Our new structure allows us to make the most of business opportunities arising from the worldwide deregulation of the electricity industry. We are consequently better able to target our resources to the characteristics and needs of the international market. We can also direct our efforts toward areas where we have competitive advantages or proven knowhow, such as construction and management of hydroelectric generating facilities, and high-voltage transmission.

In recent years, we have invested \$279 million in 10 international projects valued at a total of \$2.8 billion, generally in cooperation with Québec partners. Purchases of goods and services stemming from business partnerships with Québec-based companies generated economic spinoffs and stimulated job creation in Québec in 1999.

Industry deregulation around the world is creating new business opportunities which Hydro-Québec plans to seize.

of a direct-current interconnection built under

Queensland and New South Wales in Australia.

the technical supervision of TransÉnergie

between the power grids of the states of

PROFESSIONAL SERVICE CONTRACTS In 1999,

Hydro-Québec International (HQI) maintained or launched numerous projects as a provider of professional services. Altogether, the projects generated direct spinoffs in Québec worth nearly \$26.6 million and created jobs amounting to 120 person-years. Most of these projects are in China, Haiti, Algeria, Burkina Faso, Costa Rica, Iran, Cameroon, and Libya.

During the past year, Hydro-Québec carried out 86 projects in 31 countries. A number of these projects represent significant breakthroughs in promising markets.

In China, we acquired a 20% interest in Meiya Power Company (MPC) – one of the leading energy project managers in China – giving us a foothold in the country with the world's greatest hydropower potential.

At the same time, we signed agreements with our partner/suppliers ABB Alstom Power and General Electric Canada. These contracts include long-term mechanisms to ensure that Québec companies will receive economic spinoffs in proportion to Chinese orders placed by companies in which MPC has a stake.

Ouébec companies will

benefit from the economic

spinoffs of our projects in



Hydro-Québec is committed to working with Québec partners on international projects.

We also secured a service contract from China Power Grid Development Corporation. The job involves monitoring manufacturers' quality assurance programs and overseeing converter construction, under a technical assistance program for a major high-voltage transmission line between the Three Gorges complex and the city of Changzhou.

In Africa, we acquired 17% of the shares in Senegal's national electric utility SÉNÉLEC through a consortium with ELYO, a subsidiary of Groupe Suez Lyonnaise des Eaux. We thus became responsible for managing all of SÉNÉLEC's electricity generation, transmission and distribution.

Éconoler International, a company co-owned by HQI and Dessau-Soprin, announced the establishment of the first energy services company (ESCO) in Tunisia - Société tunisienne de gérance de l'énergie - with a mission to provide integrated solutions for reducing energy consumption.

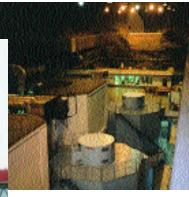
In partnership with SNC-Lavalin International, we were awarded a contract in Ivory Coast to study energy demand forecasting and develop a capital-investment program for that country's power industry.

We also landed a contract with Algeria's Société nationale d'électricité et du gaz, for the training, supervision and deployment of crews for live-line work on power lines and in high-voltage and ultra-high-voltage substations.

In Haiti, we are managing a major technical assistance program for upgrading the generation and distribution system in the province of Jacmel, on behalf of the Canadian International Development Agency.



The 37.4-MW Bel-Air gasturbine power plant in Senegal was built and commissioned in cooperation with a Québec company and a Senegalese partner.



Hydro-Québec International became co-owner of Fortuna generating station in Panama. This 300-MW hydroelectric plant is the largest in the country.

# organizational development

PEOPLE, THE KEY TO OUR GROWTH Relations between Hydro-Québec and its employees underwent significant developments during the past year. To adapt working conditions to a more competitive environment, we introduced innovative approaches that provide greater recognition for individual and group effort.

All our collective agreements, except the one for researchers at Hydro-Québec's research institute IREQ, were renegotiated or reviewed in order to involve employees more closely in the company's efforts to achieve its objectives.

Salaries of engineers, technicians, trades, and office and clerical employees were raised in accordance with government parameters, without excessive cost to the company, its shareholder or its customers. These employees also now enjoy a profit-sharing plan that provides for lump-sum payments tied to the attainment of the company's objectives. The amounts paid may be as much as 3% of annual base salary.

The agreements were approved by 90% of employees in the Syndicat professionnel des ingénieurs d'Hydro-Québec (Hydro-Québec engineers' union) and by more than 75% of employees affiliated with the Canadian Union of Public Employees.

Salaries and working conditions of office and clerical employees not covered by a collective agreement, along with professionals and executive secretaries, were revised to make their total compensation more motivating and competitive.

TRAINING, ESSENTIAL TO SUCCESS To have the resources necessary to sustain our growth and know-how, we continued to develop our employees' technical and business skills.

For example, we developed tools that will help them plan their career paths in the company. These tools, to be introduced over several years, will also allow managers to efficiently plan hiring, staffing and training.



Each and every day, our employees are the key to quality of service, development of hydropower potential, technological innovation and, more generally, to the growth and profitability of the company.

Customer satisfaction calls for employees who have an ability to adapt to change, in particular to the rapid development of business technologies.

We devoted 373 person-years to employee training. Training expenses amounted to \$72.6 million, or 4.6% of total payroll.

As regards safety, we recorded a 6.2% drop in work accident frequency, while the rate of accident severity fell by 23.9%.

To fill the positions that will become vacant in the short term and to provide for succession, we set up a hiring program for new graduates. In 1999, we hired 107 new employees in several strategic technical areas.

TECHNOLOGY SERVING EFFICIENCY To improve the management of support functions throughout the company, Hydro-Québec installed SAP R/3 software. This new computer tool, which replaces the 200 systems previously used to manage human, material and financial resources, permits real-time management of our activities, facilitates access to information and improves decision-making. To complete this major project, we had to train more than 6,400 permanent employees between October 1998 and May 1999.

At the same time, we ensured that all our computer products would help the company and its customers make a safe transition to the year 2000. Some 4,000 applications, software programs, operating systems, automatic devices and pieces of equipment underwent rigorous checks, and numerous date-reliant tests were run successfully. Hydro-Québec took part in two continent-wide industry drills in cooperation with the North American Electric Reliability Council. As a result of all these preparations, the date changeover did not cause any inconvenience to our customers.

In another area, Hydro-Québec and Bell Canada formed a joint venture, Connexim, pooling the telecommunications resources and expertise of both partners. Since the beginning of the year, Connexim has managed and operated Hydro-Québec and Bell Canada's internal telephone, data and fax networks in Québec. Hydro-Québec will thus be able to achieve savings over the medium term and exploit the potential of its telecommunications assets. This, in turn, will foster the creation of jobs on the cutting edge of technology in Québec, since Connexim plans to increase its work force to 900 employees by 2003.



With the installation of SAP R/3 software, Hydro-Québec now possesses an advanced IS tool that will improve efficiency and facilitate business decisions.

# our role in the community

AN ONGOING COMMITMENT As in previous years, Hydro-Québec made a notable contribution to the society in which it operates. Through its activities, it generates major economic spinoffs that benefit the community as a whole. It also contributes large sums to supporting associations, organizations and events, in various spheres of activity, that play a part in improving the quality of life of all Quebecers.

ORGANIZATIONS AND ASSOCIATIONS In education, our program of support for Québec universities helps finance teaching and research activities, as well as scholarships awarded to students at the undergraduate and postgraduate levels.

We sponsored the establishment of three new research chairs: a chair at the Université de Montréal for the study of toxicological risks to human health, a chair in energy conservation at Université Laval, and the Louis-Edmond-Hamelin Chair for Northern and Aboriginal Social Research, also at Université Laval. We are already associated with a dozen other chairs in various fields related to our activities. We also support a research project in small-business development at the Université du Québec à Trois-Rivières.

Since 1998, we have supported research projects on mental health and the effects of environmental factors on children's health. Our donations program includes fellowships for emeritus researchers working in these two fields.

We also contributed to a variety of community organizations. For example, we made a donation to the Centre Immaculée-Conception, which offers a wide range of services for young people, such as summer camps for children from disadvantaged homes. We supported the Fondation Ressources-Jeunesse, which helps young people enter the job market, as well as the Centre Normand-Léveillé, the only vacation camp in Québec equipped to accommodate children with more than one disability.



Hydro-Québec is still the largest donor to Centraide in Québec. In 1999, donations from employees and pensioners came to \$1.6 million. The company matched this amount, bringing our total contribution to \$3.2 million.

Hydro-Ouébec sponsors the Domaine Forget academy of music, which every summer welcomes young students aged 15 to 25 from North America and Europe.

Hydro-Québec contributes to improving the quality of life of all Quebecers by supporting a great many projects in all regions of Québec.

SPONSORSHIPS We continued to sponsor a great many projects and events in different areas.

In 1999, Hydro-Québec became the first official sponsor of the Orchestre symphonique de Montréal. The company's name will be mentioned in connection with all of the orchestra's concerts for the next three years. We also sponsor ensembles such as the Orchestre symphonique de Québec and Orchestre de chambre de Hull.

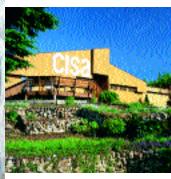
We sponsor the Domaine Forget academy of music, in Saint-Irénée, along with the international festival held there every summer, featuring 35 concerts and many well-known professional musicians.

To support up-and-coming talent, we continued to sponsor the activities of the society to promote French song, among them the competition Ma première Place des Arts and the Week-ends de la chanson events. We also sponsored the 11th Prix Miroir French-language song awards presented at Québec City's summer festival.

Activities sponsored in other fields include a French dictation contest organized by the Fondation Paul Gérin-Lajoie, and improvements to the Léon-Provencher marsh in Saint-Augustin-de-Desmaures as part of the effort to preserve wetlands.



Hydro-Québec supports the Université du Québec à Chicoutimi industrial chair on atmospheric icing of electrical system equipment and Concordia University's home automation project.



In cooperation with the Québec Atlantic salmon federation and the Atlantic salmon interpretation centre in Sainte-Flavie, we provided support for the preservation of this resource in Québec.

# regulatory affairs

The approval process for applications to the Régie de l'énergie (Energy Board) continued in 1999.

In July, the Régie adopted four regulatory principles related to the setting of transmission rates: use of a projected test year to set rates; establishment of the rate base and the capital structure using an average of 13 monthly balances; use of Hydro-Québec's fiscal year as the rate period; and determination of the main criteria to be used in identifying and segregating regulated versus non-regulated activities. In addition, the Régie rendered a decision in November on the procedure to follow in setting transmission rates. First, Hydro-Québec will conduct information sessions for stakeholders and for the regulator. Next, public hearings will be held. The Régie will then render a decision on transmission rates effective January 1, 2001.

Hydro-Québec also appeared before the Régie de l'énergie after a rate change application was filed by the Québec Forest Industries Association and a lobby group for industrial electricity consumers. After hearing the parties' statements, the Régie suspended study of this case.

The Régie decided to wait for the government's decision on electricity supply rates before ruling on an application by the Regroupement national des conseils régionaux de l'environnement du Québec (regional environmental councils) concerning the monitoring of Hydro-Québec operations aimed at ensuring an adequate power supply for Québec consumers. Following this decision by the Régie, the Regroupement filed a petition with Québec Superior Court. The Court decided to refer the matter back to the Régie for further study. Hydro-Québec has appealed this decision.

Finally, the Régie submitted its opinion on ways to establish the contribution of small-scale hydropower production to Hydro-Québec's resources plan for a decision by the Québec government.

# acquisition policy

In 1999, Hydro-Québec continued to apply the general principles of the policy "Our Acquisition of Goods and Services," approved by the Board of Directors in September 1998.

To ensure security of supply, we signed a new partnership agreement with one of our suppliers, and negotiations are proceeding smoothly on two other agreements with suppliers of goods and services linked to our core mission. One of the goals of such agreements – which total seven in all - is to encourage suppliers to develop other markets and be less vulnerable to fluctuations in the volume of Hydro-Québec's purchases.

The ISO 9000 certification requirement on quality was extended to electricity distribution contractors.

For greater efficiency, Hydro-Québec nearly doubled the number of supply agreements, which now total about 100. This type of contract allows us to reduce expenses by obtaining lower prices from suppliers, avoiding internal management costs and cutting inventory costs. These agreements are one of the ways Hydro-Québec has achieved cumulative savings of more than \$80 million in goods and services since

Hydro-Québec's operations again generated sizable economic spinoffs in Québec in 1999: purchases of goods and services totaled more than \$1.5 billion, with over 95% Québec content.

# quality of the French language



In implementing the linguistic components of the corporate governance policy and the directive for the application of the Charter of the French Language, the company's efforts in 1999 focused on developing tools for improving the quality of French used at Hydro-Québec.

Two new reference works were published: a revised and considerably expanded edition of the correspondence guide, and a style book for employees. A French glossary of terms related to energy market restructuring was also drafted and circulated in a preliminary edition. And Hydro-Québec's terminology database, updated for the transition to the year 2000, was made more user-friendly and accessible to all employees.

In connection with the Semaine du français et de la francophonie, a week-long event celebrating the French fact and language, Hydro-Québec organized its own promotional and awareness activities.

The company also presented the Office de la langue française with its annual report on the application of the Québec government's policy on the use of French in information technologies.

Lastly, Hydro-Québec's standing committee on language continued its work, meeting twice in 1999.

## statement by the Board of Directors on corporate governance

The Board of Directors is responsible for seeing that Hydro-Québec is well managed. It does this on the basis of the corporate governance principles it has adopted to ensure that the company carries out its operations in the best interests of its shareholder, employees, customers, and the local communities it serves. These principles are applied by means of commitments covering ethics, management philosophy, strategic management, business risk management, control of activities, communications, and language of work and communication.

To fulfill its responsibilities, the Board uses a number of tools developed in consultation with management, including:

- a strategic plan describing Hydro-Québec's main orientations for 2000-2004 and outlining the business environment, the orientations and strategies to be pursued, and the financial and economic outlook;
- an annual business plan comprising the capital and operating budgets, along with annual, quantifiable and measurable performance objectives for members of the management team;

- a monthly review of financial results allowing the Board to monitor progress against the targets set in the strategic plan and the business plan;
- a review of management results, presented every four
- an annual report on integrated business risk management. The Board also charged its committees with the preliminary study of a number of issues, in order to benefit from the expertise and experience of each member. More specifically, the Board asked the Ethics and Corporate Governance Committee to undertake an assessment of the Board's own performance and operation. On the basis of the results, the Committee recommended various measures to the Board for improving its operation.

Following the review of Hydro-Québec's guidelines, an accountability obligation concerning compliance with policies was instituted. Each administrative unit presents an annual report to the Board's committees so that the application of policy orientations can be gauged on the basis of management data and indicators.

## report of activities of the Board of Directors

The Board of Directors is composed of a maximum of 16 members appointed by the Québec government for terms of no more than five years, as well as a President and Chief Executive Officer appointed by the Board with government approval. The Deputy Minister of Natural Resources is an ex officio, non-voting member of the Board.

The Board of Directors met 10 times in 1999, with an attendance rate of over 70%. The Executive Committee held 10 meetings, while the other committees held 29 in all.

During the past year, the Board established the company's main orientations for the next five years; these are presented in the Strategic Plan 2000-2004 and focus on serving customers better and ensuring the company's profitable growth. The Board also monitored changes in the business plans, objectives and financial results of Hydro-Québec and its wholly owned subsidiaries.

## and Board committees

AUDIT The main role of the Audit Committee is to assure the Board of Directors that the financial statements are in order, that internal controls are adequate and effective, and that suitable mechanisms are being applied to identify and manage the major internal and external risks to which the company is exposed. The committee reads the internal audit reports and resulting action plans.

In 1999, this committee continued to monitor work toward Year 2000 compliance and installation of SAP R/3 software. It also analyzed audit reports on electricity service restoration and meter-reading for customer billing purposes, two areas closely linked to one of the company's goals, namely, to improve service quality. The committee paid particular attention to the management of administrative buildings, and recommended a number of measures to the Board on the basis of a report it received.

FINANCE The main role of the Finance Committee is to advise the Board on matters of finance, especially financing, management of corporate funds, insurance, banking, the business plan and ensuing annual budget, financial risk management and integrated business risk management.

In 1999, the committee focused considerable attention on risk analysis and management. It carefully examined the annual energy risk management program and the strategy for managing the financial risks associated with the transition to the year 2000, among other issues. It recommended the adoption of a weather risk management approach using weather derivatives. The committee also studied the company's insurance policy.

HUMAN RESOURCES The main role of the Human Resources Committee is to advise the Board on matters of hiring, total compensation, training, succession, and other subjects, including the hiring, appointment, performance review and compensation of the President and Chief Executive Officer and other senior executives.

On several occasions in 1999, the committee examined the state of negotiations with the unions representing Hydro-Québec employees and advised management on the settlement of the labor dispute. It recommended that the Board approve new wage conditions for part of the work force, introduce a profit-sharing plan tied to the attainment of corporate objectives, and declare a pension contribution

The committee studied various other issues related to such matters as corporate structure, succession in strategic positions, and employee motivation.

ETHICS AND CORPORATE GOVERNANCE The Ethics and Corporate Governance Committee ensures that Hydro-Québec is well managed in accordance with the highest standards of ethics and corporate governance and with laws and regulations. The committee also provides advice on the application and enforcement of the Code of Ethics for Directors and Executives of Hydro-Québec. It makes recommendations on rules of conduct applicable to the company's business.

In 1999, the committee recommended that the Board adopt a new Code of Ethics for Directors and Executives based on the *Regulation respecting the ethics and professional conduct of public office holders* enacted by the Québec government. The committee also suggested that the subsidiaries adopt the same code of ethics as Hydro-Québec itself and thereby benefit from the company's efforts and expertise in this area. In addition, the committee assessed the Board's performance and operation and proposed follow-up measures.

ENVIRONMENT AND CORPORATE SOCIAL RESPONSIBILITY The Environment and Corporate Social Responsibility Committee provides advice on environmental management, public health and safety, com-

munity relations, social responsibility and corporate image. The committee receives all reports and violation notices related to environmental incidents.

During the past year, the committee studied the establishment of guidelines for the allocation of donations and sponsorships, as well as university chairs. It also reviewed the environmental performance assurance program, in particular the implementation of ISO 14001. Finally, it examined the environmental performance report submitted to the Board.

PENSION FUND MANAGEMENT The role of the Pension Fund Management Committee is to advise the Board on investment management and performance, evaluation of portfolio managers and the management of the pension plan, including changes in pension obligations.

In 1999, the committee recommended that the Board review the policies on the benchmark portfolio and the management of pension fund investments. It also recommended setting up a joint fund for the various pension fund portfolios and reaching an agreement on administration fees.

Finally, the committee reviewed the performance of the pension plan portfolio and specialized portfolio managers.

### Financial Review

- Management's Discussion and Analysis
- Management Report
- Auditors' Report
- Consolidated Financial Statements
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### overview

NET INCOME topped \$900 million to stand at \$906 million, an increase of \$227 million or 33% over last year, when the results were affected by exceptional climatic events.

REVENUE capped \$9 billion for the first time to reach \$9,579 million, up 9% from 1998. The substantial growth in our sales was achieved on the strength of the Québec economy and our competitive position on markets outside Ouébec.

**DIVIDENDS** of \$453 million constituted the third consecutive payment to our shareholder. The cumulative amount paid to the Québec government since 1997 is \$1.1 billion.

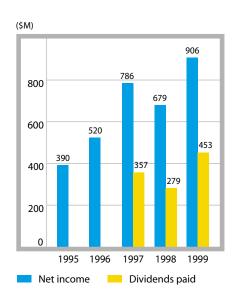
**PERFORMANCE** bounced back after slipping in 1998, bringing us closer to the objectives of the *Strategic* Plan 2000-2004. Return on revenue stood at 9.5% against 7.7% in 1998, while return on equity rose to 6.7% from 5.2% last year.

FUNDS FROM OPERATIONS totaled \$2.9 billion, up 30%, and were used to finance the Corporation's entire investment program and repay part of its long-term debt.

INVESTMENTS stood at \$2.1 billion and served to increase asset reliability, satisfy growing demand and continue business development.

REPAYMENT OF A PORTION OF LONG-TERM DEBT, coupled with the refinancing of matured debt at favorable rates, helped reduce financial expenses.

#### **Net Income and Dividends Paid**



Management's Discussion and Analysis covers Hydro-Québec's segmented results and consolidated financial position. Our analysis concludes with a discussion of the most significant risks and issues, central to our integrated business risk management approach, followed by a presentation of our outlook.

In our analysis, the consolidated group (Hydro-Québec) comprises the publicly owned corporation Hydro-Québec (the Corporation) and the companies in which it holds an interest, including its subsidiaries.

#### 1 RESULTS

Results are presented using the segmentation adopted in 1998 for financial reporting, in accordance with Canadian generally accepted accounting principles. The presentation of consolidated results will be followed by an analysis of the results of our three operating segments:

- Electricity, Hydro-Québec's core business;
- Gas, which covers natural gas transmission and distribution, mainly through our interest in Noverco;
- Expertise and Technology, which comprises the marketing of technology and know-how, through our principal subsidiaries.

The segment components are listed at the beginning of each segment presentation. At the end of the analysis, a brief illustration of the operating segments is provided by way of additional reference, along with the presentation, by segment, of our main business units, subsidiaries and interests.

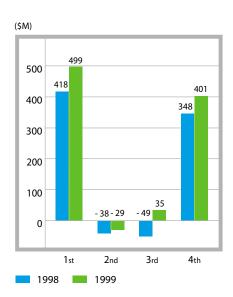
#### 1.1 Consolidated Results

The 1999 consolidated results reflect Hydro-Québec's growing profitability, in keeping with our commitment of recent years. This year, consolidated net income stands at \$906 million, up 33% from last year, which was significantly affected by two climatic events: the ice storm and unusually mild weather.

Consolidated sales total \$9.6 billion, up 9% from 1998. Total expenses of \$5.5 billion are higher by \$0.6 billion. The operating margin dipped slightly to 42% of total revenue in 1999, down 1%. However, a 1% decline in financial expenses to \$3.1 billion helped boost net income.

The quarterly results reflect efforts made throughout the year. We achieved profits of \$499 million in the first quarter, against \$418 million in 1998, an increase of more than 20%. In 1998, operations were affected by the January ice storm. The results of subsequent quarters surpassed 1998 and prior years. The \$29-million second-quarter loss, related to the seasonal ebb in electricity sales, was our best result in the past five years. The \$35-million profit in the third quarter was the highest in 15 years. Our performance in the last quarter was also good: the \$401-million profit compares favorably with the previous five years and was up 15% from the last quarter of 1998.

#### **Quarterly Net Income**



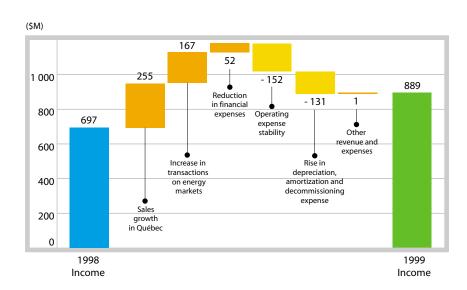
#### 1.2 Electricity

The Electricity segment, Hydro-Québec's core business, covers the generation, transmission and distribution of electricity. These activities are carried out within our business units and through the following subsidiaries and interests:

- Gestion Production H.Q. (generating activities),
- H.Q. Energy Marketing (electricity brokerage activities),
- Hydro-Québec International (electricity-related activities),
- Société d'énergie de la Baie James,
- Cedars Rapids Transmission Company,
- Churchill Falls (Labrador) Corporation.

Our Electricity segment accounts for 97% of Hydro-Québec's assets. As at year-end 1999, revenue from this segment represented 91% of consolidated revenue, compared with 93% in 1998. Segment net income stood at \$889 million, up \$192 million or 28% from 1998. This growth was driven by the factors illustrated and analyzed below.

#### **Net Income Variation Factors**



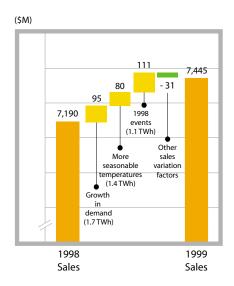
#### 1.2.1 Sales Growth in Québec

In 1999, electricity sales in Québec picked up again. Revenue totaled \$7,445 million, up \$255 million or 3.5% from 1998. The volume of sales totaled 147 TWh, an increase of 4.2 TWh or 2.9%.

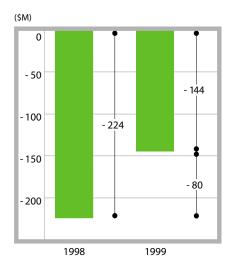
#### **Electricity Sales in Québec, by Category**

	Sales			Sales Revenue		
	<b>1999</b> Change 1998-1999			1999	Change 1	998-1999
	TWh	TWh	%	\$M	\$M	%
Residential and farm	49.3	1.6	3.4	3,034	128	4.4
General and institutional	29.8	1.0	3.5	1,963	69	3.6
Industrial	63.4	1.6	2.6	2,233	56	2.6
Other	4.5	0.0	0.0	215	2	0.9
Total	147.0	4.2	2.9	7,445	255	3.5

#### Sales Variation Factors - Québec



#### **Impact on Sales of Temperature** Variances from Seasonal Averages



Excluding the effects of the 1998 ice storm and the rate increase, sales climbed by \$144 million or 3.1 TWh. This rise is due to growing demand and more seasonable temperatures.

#### **Growth in Demand**

Growing demand, spurred by a healthy Québec economy, was responsible for \$95 million or 37% of the rise in revenue from Québec electricity sales, a volume increase of 1.7 TWh.

Demand was strongest in the industrial sector, with a 1.3 TWh increase. The pulp and paper industry, free of the work stoppages of 1998, accounted for much of this growth. More than 25% of the observed increase derived from small and medium-power customers. Overall, growing demand boosted revenue across the industrial sector by \$56 million.

Sales in the residential and farm sector and the general and institutional sector climbed by 0.1 TWh and 0.4 TWh respectively, with corresponding revenue increases of \$11 million and \$30 million. Stronger demand in these sectors was fueled by the economic upturn in Québec, which stimulated the job market, consumption, and housing construction.

#### **More Seasonable Temperatures**

In 1999, more seasonable temperatures yielded additional revenue of \$80 million compared to 1998. Although temperatures were fairly mild in 1999, they were nowhere near the all-time highs recorded in 1998. The residential and farm sector was the most affected by the weather, with increased sales of 0.9 TWh and additional revenue of \$51 million. The general and institutional sector rose by 0.4 TWh, for a \$26-million increase in revenue. In the Other sector, revenue grew by \$3 million and sales by 0.1 TWh.

Despite the positive variance due to 1999 and 1998 temperature differences, a comparative analysis of 1999 and seasonal norms shows a \$144 million shortfall, 85% of which is attributable to the residential and farm sector, the most sensitive to changes in climatic conditions.

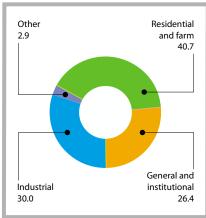
#### **Consequences of 1998 Events**

Non-recurring consequences of the 1998 ice storm had a positive effect on the year's sales, enabling us to recover 1.1 TWh in sales and \$72 million in revenue. This recovery is mainly attributable to the residential and farm sector, which recorded an increase of \$39 million or 0.6 TWh.

In line with the Strategic Plan 2000-2004, we met our commitment to freeze rates until 2002. However, the last rate increase, which took effect on May 1, 1998, applied throughout 1999 and generated additional revenue of \$39 million. The residential and farm sector accounted for the largest share of the increase, adding income of \$19 million. The remainder of the increase, \$20 million, is shared among the other three sectors: \$10 million for the general and institutional sector, \$9 million for the industrial sector, and \$1 million for the Other sector.

#### **Revenue from Electricity Sales** in Québec

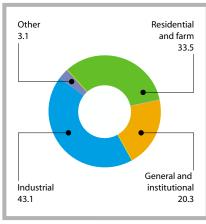




1999

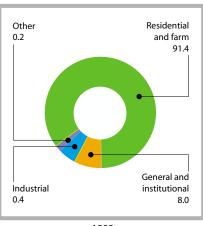
#### **Electricity Sales in Québec**

(%)



#### **Customers in Québec**

(%)



1999

#### **Other Sales Variation Factors**

Other variations are primarily related to financial market fluctuations. In 1999, the 8.1% decline in the average annual price of aluminum pushed revenue down by \$31 million compared with 1998. The impact of the exchange rate on sales in U.S. dollars is negligible compared with the previous year. Changes in the exchange rate and the price of aluminum affect only industrial customers. Derivative instruments are used to manage these factors in order to mitigate their effect on the enterprise's results.

#### 1.2.2 Increase in Transactions on Energy Markets

In addition to electricity sales in Québec, we continued our marketing efforts to seize business opportunities stemming from the restructuring of the North American electricity market.

#### **Composition of Energy Markets**

	1999	Change 1998-1999		
	\$M	\$M		
Sales outside Québec	1,051	237	29.1	
Electricity and fuel purchased	636	100	18.7	
Other income	124	30	31.9	

#### Electricity Sales outside Québec

The opening of wholesale markets to competition offers electricity producers and resellers greater flexibility in choosing their transactions. Generally, open markets have led to a larger number of short-term transactions and, consequently, increased price volatility. Our reservoirs and interconnections have given us the leeway to increase our purchase-resale transactions on outside markets and to make favorable market price arbitrages.

In this environment, short-term electricity sales outside Québec climbed sharply in 1999. At year-end, these sales amounted to \$624 million, or almost 7% of total sales, for a revenue increase of \$206 million or 49% over 1998. The volume of these sales outside Québec reached 16 TWh, up 5.7 TWh from last year. This growth was supported by our surplus generating capacity and, to a lesser extent, short-term electricity purchases concluded at favorable terms on outside markets.

#### **Electricity Sales outside Québec**

	1999	Change 1998-1999	
	\$M	\$M %	
Short-term sales			
Other provinces	196	105	115.4
United States	428	101	30.9
	624	206	49.3
Long-term sales			
Other provinces	27	2	8.0
United States	365	- 4	- 1.1
	392	- 2	- 0.5
International sales	35	33	_
Total	1,051	237 29.1	

Although short-term transactions are on the rise, the energy market is still in transition. Accordingly, long-term sales remained at the same level, totaling 8.2 TWh for revenue of \$392 million. However, pursuant to the ratified agreements, many of these long-term sales contracts will expire by the end of 2002. The reduction in longterm sales on outside markets will free up quantities of energy that the Corporation can resell at favorable prices in short-term transactions outside Québec or use to meet growing domestic demand.

Lastly, we are stepping up our activity in international markets: our interests in Panama and Costa Rica contributed an additional \$33 million in electricity sales this year.

#### **Electricity and Fuel Purchased**

Our transactions in energy markets call for effective energy supply management, which explains our electricity and fuel purchases.

In 1999, electricity purchases totaled \$544 million, up \$68 million or 14.3% from last year. Excluding the 31% increase related to short-term electricity purchases, primarily for resale, the growth in electricity purchases was no more than 6% and is attributable to agreements with private producers. Costs related to these agreements reached \$148 million at year-end, compared with \$125 million in 1998. This increase is explained by the commissioning of five new generating stations and the indexation of prices paid under contractual agreements. Purchases from Churchill Falls generating station totaled \$110 million, a level comparable to 1998.

#### **Electricity Purchased**

	1999	Change 1998-1999		
	\$M	\$M	%	
Regular purchases	285	16	6.0	
Short-term purchases*	258	61	31.0	
Other	1	- 9	- 90.0	
Total	544	68	14.3	

<sup>\*</sup> Includes purchase options.

Fuel purchased stood at \$92 million at year-end and comprised mainly fuel oil purchased for tolling operations and to power our thermal generating stations. As part of managing these supplies, quantities of fuel oil purchased this year were resold at favorable prices on the markets.

#### Other Revenue

Our energy storage service, tolling agreements, and fuel oil sales and storage generated revenue of \$72 million, compared with \$92 million in 1998. Although primarily instruments for managing energy supply, these services also provide the additional benefit of enabling us to optimize the commercial potential of our assets.

Lastly, as part of our international operations, our construction activities contributed significantly to growth in revenue. A contract to build a transmission line for an interconnection in Peru yielded \$52 million in revenue at year-end. The project, started in 1998, generated barely \$2 million in revenue that year.

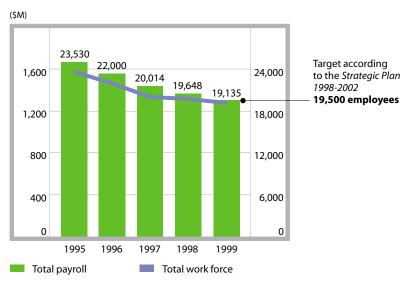
#### 1.2.3 Operating Expense Stability

Operating expenses remained relatively steady at 19% of revenue, identical to the past two years, excluding expenses related to our principal international activities. In absolute dollar terms, however, operating expenses were up by \$94 million over 1998 to \$1,657 million. The increase reflects the return of current activities to a normal pace and the lower proportion of expenses capitalized to investment projects.

The portion of expenses capitalized to investment projects has been falling for the past few years. In 1999, only 21% of total expenses were capitalized, well below the 26% average of the previous five years. This unique situation stems from the slowdown in system reinforcement and looping activities and the priority accorded, following the labor conflict, to preparing the system for the winter peak.

Labor costs, which account for most of our total expenses, have steadily declined over the past several years. In 1999, payroll expense made up only 61% of total expenses, compared with an average of 70% for the past five years. This decrease in payroll expense is clear proof that we have kept our promise to stabilize the total work force, in keeping with our Strategic Plan 1998-2002. As at December 31, 1999, our work force totaled 19,135 employees, compared with our announced target of 19,500.

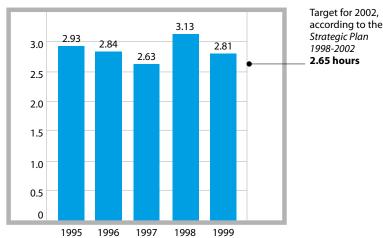
#### **Total Payroll and Work Force\***



<sup>\*</sup> Total work force excludes employees on unpaid leave and temporary site employees.

Routine maintenance and system enhancement activities, including salaries, accounted for just over 25% of operating expenses, or approximately \$450 million. Service quality and reliability, our core concern, was the focus of sustained effort and is still monitored on an ongoing basis. One indicator of network performance is average interruption time per customer. This year, we exceeded our performance target, with interruption time per customer limited to 2.81 hours. Our target for 1999 was 2.85, a milestone on the way to our goal of 2.65 in 2002. Our plan is to reach 2.35 hours per customer by 2004.

#### Average Hours of Service Interruption per Customer\*



\* Excluding major climatic events.

The cost of work related to the year 2000 issue totaled \$40 million over five years, including \$9 million for the year just ended. This amount was below forecast, and reflects the rigorous management of work done to ensure the smooth changeover to the year 2000. Starting in 1995, we worked on converting our computer equipment and systems to ensure the correct processing of dates later than 1999. Our year 2000 compliance efforts extended to all our systems, in particular, control of system operations and customer billings. Activities affected 1,000 automatic controls for the power grid and generating stations, 575 pieces of equipment and operating software related to the technology infrastructure, and more than 2,000 information systems designed internally or provided by external suppliers. Because Hydro-Québec operates around the clock, seven days a week, some 300 people usually ensure service continuity on January 1. However, this year, the number working on December 31 was 1,300. These employees provided real-time monitoring of systems and installations critical to electricity service. Back-up measures were put in effect, emergency centres were on call, and the emergency back-up plan was partially implemented. There were no incidents of note.

In general, certain specific events caused mutually offsetting movements in operating expenses. The introduction of the new Canadian accounting standard for employee future benefits had a significant impact on income. Total pension expense, a large proportion of which affects operating expenses, showed a favorable variance of \$140 million over the previous year. The pension credit resulted from the consequent use of market-related methods and assumptions to determine pension expenses and the Hydro-Québec Pension Plan surplus. However, the labor conflict

that lasted from May to September also affected operating expenses. The situation reduced work related to capitalized projects, as previously mentioned, and created additional costs due to the intensification of work to catch up on preparing the system for the coming winter. Also, under the negotiated agreement, the employees received an incentive bonus in 1999 of 2% or 3% of their base salary, depending on their job category, a salary increase of 1.5% and improvements in the pension plan, including a contribution holiday. The employee profit-sharing plan, a common business practice, recognizes the contribution of employees to the enterprise's performance.

Lastly, in 1999, we incurred \$58 million in additional operating expenses for our principal international activities, which are expanding in line with our strategic development orientation. These expenses relate to our operations in South and Central America, in particular, the TransMantaro project to build and operate an interconnection line in Peru, as well as the operation of Fortuna generating station in Panama and a small power plant in Rio Lajas, Costa Rica.

#### 1.2.4 Rise in Depreciation, Amortization and Decommissioning Expense

Amortization, depreciation and decommissioning expense rose by \$131 million or 8.5% in 1999, reaching \$1,664 million by year-end. The increase is primarily attributable to depreciation of fixed assets. The sinking fund method of depreciation, which results in a depreciation expense that grows over time, is an intrinsic factor in this increase. The increase in depreciation expense for fixed assets was also due to the downward adjustment made to the life of certain assets during the year, combined with the effect of current-year commissionings and the impact, over a full year, of prior-year commissionings.

#### 1.2.5 Reduction in Financial Expenses

Financial expenses amounted to \$3,036 million in 1999, compared with \$3,088 million in 1998, down \$52 million or 1.7%.

#### **Financial Markets**

Changes in financial expenses are influenced by conditions on capital markets. In this respect, 1999 was characterized by financial market stability and strongerthan-anticipated economic growth. Instead of heading into the deflationary cycle heralded by the financial crisis in Asia, the world economy was clearly on the upswing in 1999.

In 1998, the Canadian dollar fell in relation to the U.S. currency. In 1999, after a turnaround early in the year, the Canadian dollar remained fairly stable until it rose at year-end. As a result, the 1999 average Canada-to-U.S. dollar exchange rate at U.S.\$0.673 approximated that of 1998, or U.S.\$0.674. The Canadian dollar's good showing was driven by economic growth in the United States, which benefited Canada, the rising price of raw materials and the economic upturn in Asia.

The stable Canadian dollar pushed down short-term interest rates on the Canadian market in the second quarter. In the last quarter, rates began to rise in the aftermath of short-term rate hikes in the United States, where economic growth remains exceptional.

In Canada, long-term interest rates, after dropping in late 1998 to record lows of around 5%, edged up slightly during the year.

#### **Financial Risk Management**

The Corporation uses an integrated risk management approach to control the uncertainty inherent in its results and to optimize the risk-return ratio of flows related to currency fluctuations, interest rates and aluminum prices. In the event of market movement, this strategy enables us to maximize potential gains, while limiting maximum loss to the level established by the Board of Directors at the beginning of the year.

#### Interest

Interest expense amounted to \$2,902 million, compared with \$2,951 million the previous year, down \$49 million or 1.7%. The decrease was mainly due to maturing long-term debt, refinanced at very favorable interest rates, as well as the decline in long-term debt. These two factors reduced interest expense by \$134 million compared with 1998. The decrease in debt will generate recurring annual savings in the order of \$35 million, excluding the effect of the exchange rate.

On the other hand, the positive impact of these factors was partially offset by a decline in investment income, which is netted against interest expense. Fluctuations in exchange rates and interest rates, including the offsetting effect of managing them with derivative instruments, also pushed up financial expenses.

#### Exchange Loss

The exchange loss was \$134 million, compared with \$137 million in 1998. Amortization of the unrealized exchange loss hardly fluctuated between 1998 and 1999, with the average Canada-to-U.S. dollar exchange rate remaining relatively stable. In addition, the volume of maturing currency-denominated debt was much the same as in 1998.

#### 1.3 Gas

The Gas segment includes natural gas transmission and distribution activities. It comprises the interest in Noverco and the gas brokerage activities of the enterprise and its subsidiaries, H.Q. Energy Marketing and H.Q. Energy Services (U.S.) (HQUS).

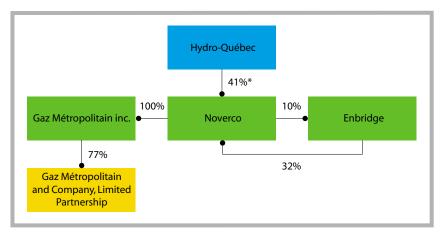
#### **Sector Results**

	1999	Change 1998-1999	
	\$M	\$M	%
Revenue	758	190	33.5
Expenditure	719	166	30.0
Net income	39	24	160.0

The energy convergence driving North American markets confirms the validity of our orientations in the gas industry. In the last quarter, we set up a new business unit, "Natural Gas Sector." Its mission is to provide us with a significant targeted presence in this market, so that we can capitalize on any business opportunities. In natural gas transmission and distribution, the new business unit continues to support the initiatives of Gaz Métropolitain and Company, Limited Partnership (GMCLP) and of Enbridge, through our investments in Noverco. In brokerage, it reestablishes our positions and enables us to keep pace with changing needs and market potential, especially in Québec.

#### Interest in Noverco

Our interest in Noverco yielded net income of \$28 million, up \$15 million from last year. This increase can be explained mainly by a dilution gain realized by Gaz Métropolitain from the issue of GMCLP units in 1999. The effects of weather on GMCLP's financial results were smoothed by a rate-stabilization mechanism.



<sup>\*</sup>The Corporation also holds purchase options on an additional 9% of the shares.

#### Other Segment Activities

Other Gas segment activities earned net income of \$11 million, primarily from gas brokerage in the Québec and U.S. markets.

In 1999, through our subsidiary HQUS, we made gas sales of \$17 million on U.S. markets. The subsidiary's mission is to carry out transactions with businesses located near U.S. consumer markets. The project to supply the thermal generating station in Bucksport, Maine, and the marketing of transmission capacity for tolling purposes on the New England market are two examples.

#### 1.4 Expertise and Technology

The Expertise and Technology segment comprises the marketing of technologies and know-how developed by Hydro-Québec. The segment includes the subsidiaries involved in this area: Hydro-Québec CapiTech (H.Q. CapiTech), Hydro-Québec International (HQI) and the holding companies of the business units Gestion Production H.Q., HQ TransEnergy and Hydro-Québec Valtech.

In 1999, the Expertise and Technology segment posted a loss of \$22 million, compared with \$33 million in 1998. The \$11-million variance resulted from restatements in the segment's consolidated results for 1998 and 1999, and a slight rise in the profitability of marketing activities this year.

The performance of the business units' holding companies was responsible for the improved results in 1999. At year-end, net income was \$6 million, a \$16-million improvement over 1998, when reorganization and restructuring costs negatively affected results. Also in 1999, the \$5.5 million in income from our interest in Connexim contributed to the turnaround.

For Hydro-Québec International's expertise activities, the year closed with a loss of \$9.5 million, as opposed to net income of \$1.6 million in 1998. In the last quarter, in keeping with its new mandate, HQI reorganized its resources to concentrate on business development in the international sphere. Hydro-Québec's business units will now be in charge of developing and managing projects and investments.

Finally, H.Q. CapiTech recorded net income of \$1.8 million, comparable to last year. The subsidiary invests in businesses that provide energy-related high-tech products and services. In 1999, HQ CapiTech reviewed its selection criteria as a venture capital company. Considering the stage of development of venture capital in the energy industry and the subsidiary's fledgling experience in this area, the selected approach is essentially conservative and consistent with the strategies of the enterprise's business units.

#### 2 FINANCIAL POSITION

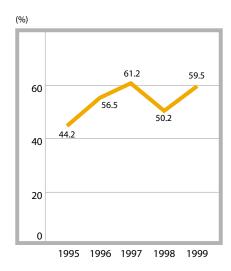
#### 2.1 Operating Activities

Operating activities generated cash flows of \$2,884 million in 1999, up \$659 million or 29.6% from the previous year.

This cash-flow increase mainly resulted from the growth in net income, which, adjusted to add back depreciation and amortization expense, rose by \$365 million in 1999. This growth signified more than a return to normal operating conditions, and was driven by increased sales of electricity inside and outside Québec. In 1998, net income had slipped because of unstable financial markets and two uncontrollable natural events: exceptionally mild weather and the ice storm. Also, the \$182 million of cash outflows required by the ice storm and operating activities in 1998 will be reimbursed by the Québec government no later than December 31, 2002.

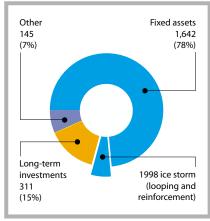
Cash generated during the year served to fund the Corporation's investment program and repay part of its long-term debt. The cash-flow increase had a positive effect on Hydro-Québec's self-financing ratio, which rose to 59.5 % by year-end 1999, compared with 50.2% at year-end 1998.

#### Self-Financing Ratio



#### **Investments**

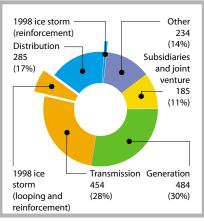
(\$M)



1999

#### **Investments in Fixed Assets**

(\$M)



1999

#### 2.2 Investing Activities

Investment activities amounted to \$2,098 million in 1999, down \$228 million or 9.8% from the previous year. This decline, stemming mainly from a reduction in investments in fixed assets, was partially offset by the increase in long-term investments.

#### Fixed Assets

#### The Corporation

The Corporation invested \$1,457 million in fixed assets over the year, \$527 million less than the previous year's investment of \$1,984 million. The labor conflict slowed work on several projects. As well, the ice storm of 1998 required investments of \$614 million, including \$455 million to rebuild the transmission and distribution systems. Excluding all ice-storm-related work for the past two years, investment in fixed assets amounted to \$1,311 million in 1999, slightly down from the \$1,370 million invested in 1998

#### 1998 Ice Storm

Aside from repairs to our transmission and distribution systems, major looping and reinforcement work required investments of \$146 million in 1999. Work was temporarily halted in February 1999, but will be finished by 2002, pursuant to the applicable acts and regulations. The work will give rise to disbursements in the order of \$800 million from 2000 to 2002, including more than \$600 million for the transmission system.

#### Generation

In 1999, to secure electricity supply for Québec customers, we invested \$484 million in our generating facilities. Almost half this amount, or \$228 million, was used for the construction of Sainte-Marguerite-3 generating station. Its commissioning, scheduled for 2001, will add 882 MW to our current capacity. We also pursued our upgrading and rehabilitation program, aimed at modernizing and maintaining the efficiency of generating stations while prolonging their useful life. In some cases, the work will also boost capacity. Current projects in which we have invested most heavily include Beauharnois, Bersimis-1, Shawinigan-2 and Shawinigan-3 generating stations.

#### Transmission

In 1999, \$454 million was invested in our transmission system. In addition to a \$139-million, ice-storm-related investment for system reinforcement and looping work, \$315 million was injected into projects designed primarily to ensure system continuity. Major work included replacing equipment at Beauharnois sending-end substation, as part of the generating station rehabilitation, as well as modernizing our System Control Centre. The work done on the Sainte-Marguerite-3 project includes the construction of a substation and a line.

#### Distribution

An amount of \$285 million was invested in distribution activities during the year. In the aftermath of the 1998 ice storm, \$7 million was spent to strengthen the system. We also invested \$278 million in system maintenance, improvement and expansion. These investments are intended to maintain high customer satisfaction with electricity supply, reliability and quality.

#### Other activities

Over the year, we spent \$234 million on other projects. The bulk, \$133 million, was used for support equipment, including \$49 million for computer technology. We also invested \$76 million in our telecommunications facilities.

#### Subsidiaries and joint venture

Investments in fixed assets made by the Corporation's subsidiaries and joint venture totaled \$185 million, \$77 million more than in the previous year. Our share of the investments by GMCLP, in which we hold an interest through Noverco, is \$89 million. Our subsidiary HQI also invested \$62 million in various projects, primarily to build high-voltage transmission systems in South America and Australia. Lastly, \$33 million went toward upgrading Sept-Chutes and Chute-Bell generating stations, in partnership with the local communities. These projects were carried out by our subsidiary Gestion Production H.Q.

#### **Commissionings**

Commissionings by the Corporation totaled \$958 million in 1999, compared with \$1,539 million the previous year, a decrease of \$581 million or 37.8 %. Excluding commissionings related to the 1998 ice storm in the past two years, commissionings amounted to \$849 million in 1999, \$235 million less than in the previous year. This decline is principally due to the labor conflict, which delayed work and resulted in the postponement of certain commissionings.

Since the completion of major work on Phase II of the La Grande complex, annual commissionings have ranged between \$1 billion to \$1.5 billion.

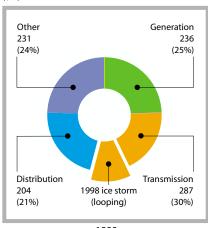
On the generation side, the year's commissionings amounted to \$236 million and were mainly related to major upgrading and rehabilitation of generating stations. On the transmission side, commissionings totaled \$287 million, including \$109 million for the section of the Montérégie loop between Des Cantons and Saint-Césaire substations. Commissionings for distribution amounted to \$204 million. Other commissionings totaled \$231 million, \$168 million related to support equipment, \$44 million to telecommunications.

#### **Long-Term Investments**

Capital of \$298 million was injected during the year into the Corporation's subsidiaries and joint venture, which in turn made investments of \$283 million, \$128 million more than in the previous year. These investments are related to international market development, as well as to activities in the gas and expertise and technology sectors.

#### Commissionings\*





\* Excludes subsidiaries and joint venture.

#### **Long-Term Investments**

(\$M)

Total	298	283	311
Other	96	22	48
H.Q. Valtech	2 <sup>b</sup>	<b>2</b> <sup>b</sup>	2 <sup>b</sup>
H.Q. CapiTech	26	29	34
Noverco	_	46	43
HQI	174	184	184
	joint venture	venture	Québec <sup>a</sup>
	sidiaries and	and joint	Hydro-
	in its sub-	subsidiaries	Ву
	Corporation	Corporation's	
	By the	By the	

a Includes eliminations for consolidation purposes

#### Hydro-Québec International

In international development, our subsidiary HQI made investments in 1999 of \$184 million including \$92 million in partnership projects to operate high-voltage transmission systems and hydroelectric generating stations. We also invested \$83 million in China to acquire a 20% interest in Meiya Power Company. This is a highly strategic investment, particularly given that China's hydroelectric potential is among the highest in the world. Our international activities are intended to boost the enterprise's medium- and long-term growth, as well as its profitability.

#### Noverco

We have been active in the gas sector since 1997, mainly through our interest in Noverco, which includes Enbridge and GMCLP. These companies are involved in natural gas transmission and distribution. In 1999, investment in this sector consisted of an additional \$46 million injected into Enbridge.

We plan to continue our development in this high-growth sector in the coming years. Accordingly, the new Natural Gas Sector business unit will develop an investment plan to complement current gas activities.

#### Hydro-Québec CapiTech

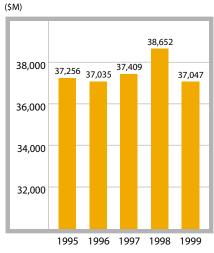
HQ CapiTech invested venture capital of \$29 million in the energy sector during the year. From 2000 to 2004, the subsidiary will gradually build up a venture-capital portfolio of up to \$100 million. The investment policy adopted states that 70% of the portfolio will be aligned with the enterprise's requirements and business strategies, while 30% will be invested in international funds so that the enterprise can join in technological innovation trends throughout the world.

#### Hydro-Québec Valtech

Early in 1999, HQ Valtech, in partnership with Bell Canada, set up Connexim. The new company provides telecommunication network management services. In 1999, Hydro-Québec invested \$35 million in Connexim through a transfer of fixed assets.

b Excludes an investment of \$35 million that did not result in any cash outflow.

#### **Variation in Debt\***



Borrowed (repaid)	552	- 282	- 410	- 367	- 407
Effect of exchange rate	- 397	61	784	1,610	- 1,198
Total variation	155	- 221	374	1,243	- 1,605

<sup>\*</sup> Includes debt payable within one year and financial assets related to debt, but excludes perpetual debt.

#### 2.3 Financing Activities

The following analysis focuses on the financing activities of the Corporation for the year, and represents substantially all such Hydro-Québec financing activities.

Pursuant to the enterprise's orientations, the entire investment program and a portion of maturing debt were financed with funds from operations. The Corporation thus reduced long-term debt by \$407 million, or 1.1%, from the previous year. The conversion of currency-denominated debt further reduced long-term debt to \$1,198 million, reflecting the variation in year-end exchange rates. As at December 31, 1999, long-term debt stood at \$37,047 million, compared with \$38,652 million at year-end 1998.

In developing its financing strategies, the Corporation focuses on diversifying funding sources, managing foreign exchange risk, staggering debt refinancing and managing the early-redemption options contained in its debt securities.

Sources of funding are being diversified gradually in order to obtain the best possible financing. In 1999, the market in Canadian dollars became significantly more attractive. We completed substantially all our financing program on that market, almost half during the first two months of the year. We also maintained our presence on the U.S. and European markets by floating an international issue.

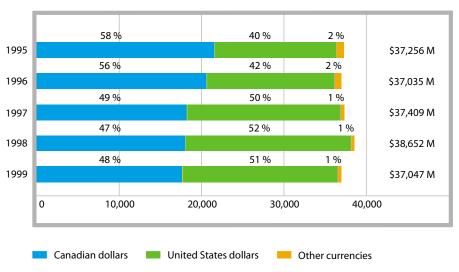
In order to optimize the staggering of debt-security maturities and provide a degree of predictability that is comfortable for financial markets, we strive to maintain as balanced a refinancing schedule as possible. In 1999, interest rates hit an historic low, prompting us to realize approximately 70% of our refinancings for 30 years and over. Accordingly, in January, we floated a public issue of \$400 million on the Canadian market, at a rate of 6%, maturing in 2031. In February, we reopened the issue, increasing the amount outstanding by \$400 million under equally attractive conditions.

The term of our international issue, however, was maintained at 10 years. This decision was also motivated by the possibility of attracting more European investors, who are not as interested in issues with very long terms. The issue, totaling \$500 million and maturing in 2009, was floated at the end of June and was very well received abroad. To complete our financing, we also issued medium-term notes, primarily on the Canadian market.

We elected to exercise two early-redemption options on bonds bearing interest at an average annual rate of 11.32%, substituting issues with rates approximating 6%. In 2000, the Corporation can exercise its call option on \$660 million in bond issues bearing interest at an average rate of 12.8%.

During the year, borrowed capital amounted to \$2,208 million, down \$264 million or 10.7 % from 1998. Of the resulting financing, \$2,206 million was used for repayment of maturing debt and \$417 million for early redemptions. As mentioned earlier, the repayments and redemptions were partially financed with funds from operations.

#### **Breakdown of Debt\* by Currency of Repayment**



<sup>\*</sup> Includes debt payable within one year and financial assets related to debt, but excludes perpetual debt.

#### **Short-Term Financing**

For funding purposes, we have C\$365 million or U.S.\$350 million in credit lines with the principal Canadian banks and a U.S.\$50 million credit line with a U.S. bank. We also have revolving standby credits totaling U.S.\$1,800 million. Our authorized commercial paper program totals U.S.\$2,750 million. At year-end, the cash from this program reached C\$48 million on the Canadian market.

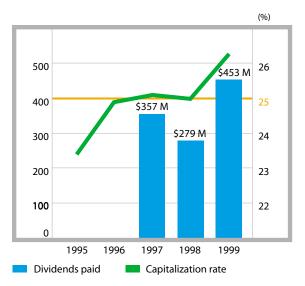
#### Dividends, Capitalization Rate and Interest Coverage

With a year-end capitalization rate of 26.9% before dividend payment, Hydro-Québec was able to declare dividends of \$453 million, or 50% of net income. After dividends were paid to the shareholder, the capitalization rate stood at 26.2%, compared with 25% in 1998.

#### **Interest Coverage**



#### **Dividends Paid and Capitalization\***



<sup>\*</sup> The declaration of dividends is subject to a capitalization rate of 25%. After payment of dividends, the capitalization rate must not be less than 25%

The growth in revenue and, to a lesser extent, the decline in financial expenses materially improved Hydro-Québec's interest coverage, from 1.19 times interest expense in 1998 to 1.26 in 1999.

#### **Credit Ratings**

	1999	1998
U.S. agencies Moody's Duff & Phelps Standard & Poor's	A2 positive AA- A+ stable	A2 stable AA- A+ stable
Canadian agencies CBRS DBRS	A stable A (low) stable	A stable A (low) stable

#### 3 RISKS, ISSUES AND OUTLOOK

#### 3.1 Risks and Issues

Hydro-Québec, as a modern enterprise, operates in a business environment characterized by increasingly free and open market conditions. The proliferation of business opportunities in recent years requires speedy decision-making. This is why we have already made the switch to integrated business risk management.

In 1999, we continued to implement our three-pronged strategy: first, to influence decision-making by adding risk analysis as a permanent component; second, to put the approach at the core of the business's planning process so as to better manage the volatility of net income over the short term and anticipate and assess the positive and negative repercussions of events on the business's orientations over the longer term; and third, to provide for continuous improvement of the process using monitoring and evaluation indicators.

Several milestones were passed this year. Our business units developed their opportunity and risk profiles, which were then consolidated to produce the corporate risk portfolio. This was done during the business plan preparation process. Also, since a new strategic plan was developed in 1999, we focused on articulating the annual and strategic plans. At the same time, we continued to raise awareness of the shift in our corporate culture to integrated risk management.

A number of risks were analyzed over the year, and we designed new instruments to enhance risk management. Some risks were the focus of specific studies, including the risk of extreme climatic conditions and risks related to runoff and temperature variances.

The risk of extreme climatic conditions encompasses floods, ice storms, earth-quakes, fires and the like. Although such events occur infrequently, they can cause considerable damage to our facilities and operations if not adequately taken into account. Major variation in runoff is Hydro-Québec's greatest risk, since 93% of our electricity is generated from hydropower. The reservoir water level—in a sense, our goods inventory—undergoes seasonal variations, with levels rising in spring and fall, and annual variations which are fairly unpredictable. Considering the size of our reservoirs, the annual variation in runoff has an impact over several years. The temperature variance risk stems from the fact that a large proportion of our customers use electricity as their primary source of heat. Significant temperature variances have an appreciable impact on seasonal demand.

Analyses and work related to these risks resulted in a review of the insurance portfolio and general emergency preparedness plan for extreme weather conditions, improved monitoring of runoff risks, as well as strengthening and diversification of risk-mitigation measures for temperature variances.

Other factors and the corresponding business risks also affect electricity sales and the enterprise's bottom line, specifically, economic conditions, demographic changes and environmental concerns. We have been monitoring these factors and risks for a number of years now. The international environmental management standard ISO 14001 was implemented in a number of business units in December 1999. It will be in force by the end of 2000 for generating activities and by 2002 for the enterprise's other activities. At the same time, as the third millennium drew near, we took the final steps and obtained the necessary certifications to minimize the risk related to our information systems changing over to the year 2000. In assessing this risk, we considered the effect of any malfunctions on the corporate mission, customer service and public safety. We achieved our objectives, and the year 2000 transition went smoothly, with no inconvenience to our customers.

Financial risks related to interest-rate, exchange-rate and aluminum-price volatility were also the target of active integrated management, described in the section *Reduction in Financial Expenses*. Along the same lines, we implemented mechanisms guaranteeing the security of our funding sources a number of years ago.

We plan to remain among the leaders in integrated risk management by continuously improving our process, specifically by researching and incorporating business best practices.

#### 3.2 Outlook

#### **Business Environment**

Over the past few years, the worldwide electricity sector has undergone dramatic changes that have resulted in more open markets and fiercer competition, particularly in the generating sector.

In the United States, which accounts for part of the Corporation's sales, the opening up of wholesale markets and transmission systems has given rise to electricity industry restructuring and a reciprocity requirement for foreign companies wishing to operate as power marketers in the U.S. Hydro-Québec and its subsidiary, H.Q. Energy Services U.S., have access to the U.S. market, providing Hydro-Québec with enhanced flexibility by enabling it to trade both at the Québec border and directly in the market.

As barriers have fallen in wholesale markets, short-term transactions have increased. The growth in short-term sales in 1999 reflects our advantageous competitive position in the new environment.

In Canada, although market restructuring is under way, competition is still limited. In Ontario, however, the wholesale and retail markets are supposed to open up to competition in 2000, which could translate into significant supply and arbitrage transactions for Hydro-Québec in the future.

Concurrent with the opening of North American markets, the next few years should see strong growth in world energy requirements. Hydro-Québec has developed recognized know-how, especially in hydroelectricity generation and high-voltage transmission systems, and the enterprise intends to capitalize on business opportunities in the construction and operation of new facilities. However, anticipated growth in the worldwide demand for energy cannot be dissociated from environmental concerns. Hydropower is consequently a highly advantageous solution because it is cost-effective and helps reduce the greenhouse effect.

In Québec, the wholesale electricity market began opening to competition in May 1997. Hydro-Québec's electricity rates, its transmission and distribution activities, and most gas-related activities are supervised and controlled by the Régie de l'énergie du Québec. The Corporation is awaiting a decision by the Québec government concerning the initial procedure for the determination and implementation of rates for the supply of electric power. Our rates, like those of other hydroelectricity producers, are among the lowest in North America.

#### Strategic Plan 2000-2004

Hydro-Québec submitted its first strategic plan, covering 1998-2002, in 1997. That plan targeted growth and profitability through seizing high-potential business opportunities. The revised strategic plan, applicable to 2000-2004, reaffirms our growth and profitability orientation, while giving priority to customer service improvement objectives.

In this perspective, our commitment to freeze rates has been extended to 2002 for all customers. After that, we plan to maintain rate stability. Steps will also be taken to tailor services to high-priority customer expectations and thereby enhance customer satisfaction. Concrete targets have been set for improving power supply reliability, and one of our priority objectives continues to be that of ensuring a secure electricity supply for Québec customers, on competitive terms.

To ensure medium- and long-term growth, we plan to seize business opportunities in other markets, and continue developing profitable hydroelectric potential in Québec and the surrounding area. Beyond the profitability requirement, hydroelectric potential will be developed in consultation with local communities and with a concern for the environment. In this context, research and development is being redirected toward our core businesses in order to stimulate technological innovation and, among other things, reduce construction costs and prolong the life of facilities and equipment, which will enhance profitability.

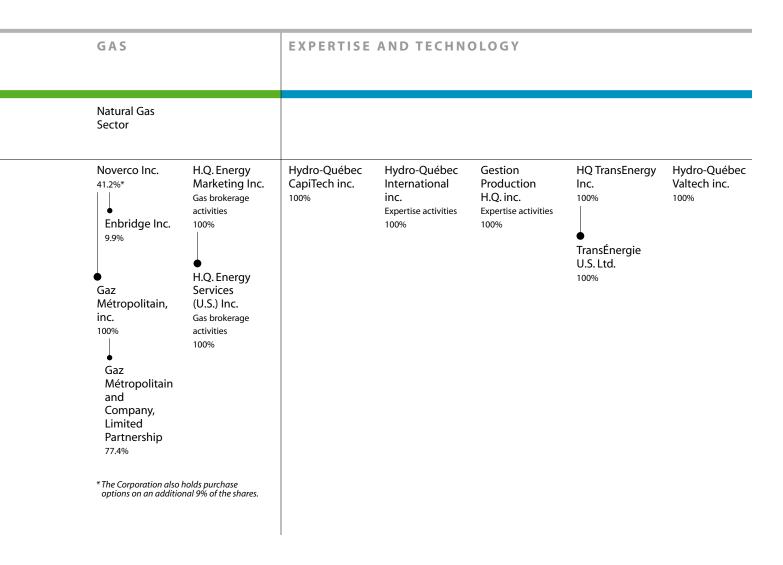
OPERATING SEGMENTS (principal components)	ELECTRICIT	Υ			
Hydro-Québec business unit, division or activity	Generation	TransÉnergie	Distribution and Customer Services		IREQ (Hydro-Québec's research institute)
Subsidiary, joint venture or interest	Gestion Production H.Q. inc. Generating activities 100%  Churchill Falls (Labrador) Corporation Limited 34.2%  H.Q. Energy Marketing Inc. Electricity brokerage activities 100%  H.Q. Energy Services (U.S.) Inc. Electricity brokerage activities 100%	Cedars Rapids Transmission Company, Limited 100%		Hydro-Québec International inc. Electricity-related activities 100%  Société d'énergie de la Baie James 100%	

Outside Québec, as mentioned earlier, the growing worldwide demand for energy and the restructuring of North American electricity markets will give rise to new business opportunities. We will capitalize on these opportunities by focusing on partnerships, which will have economic spin-offs for the Québec electricity industry. We also plan to remain active in the North American gas sector, which has considerable growth potential.

#### 2000 Financial Outlook

The economic growth recorded in Québec in 1999 should continue in 2000, although probably at a less-sustained rate. Since the energy market follows economic trends, sales of electricity in Québec will also rise over the year.

Most of Québec's requirements related to growth in demand will be met in the years ahead using energy that becomes available when long-term contracts in export markets expire. The expiry of these contracts will also enable us to step up profitable purchase-resale transactions.



Favorable economic conditions in Québec and the rest of North America may unfortunately fuel inflation and, in turn, drive up interest rates. Higher interest rates will place additional pressure on our financial expenses, reducing the positive impact of revenue growth on net income.

A stable work force and tight control of our operating expenses will, however, ensure growth in net income. Despite aggressive and ongoing exposure management, as described in the section Risks and Issues, these risks, if they materialize, may have an impact on our financial results.

In 2000, investments will be slightly higher than in 1999 for both current operations and development. Amounts earmarked for generation, transmission and distribution represent almost two-thirds of total investments. The construction of Sainte Marguerite-3 and Grand-Mère generating stations along with the rehabilitation of Beauharnois are the major generating projects planned. Improving the quality and reliability of transmission and distribution systems, including their reinforcement, is the reason behind investments planned for these activities.

Lastly, our approved financing program is \$2.8 billion for the year 2000.

### management report

Hydro-Québec's consolidated financial statements and all additional information contained in the Annual Report are the responsibility of Management and are approved by the Board of Directors. Management's responsibility also includes the selection of appropriate accounting practices in accordance with generally accepted accounting principles in Canada, taking into account generally accepted accounting methods and practices of regulatory bodies. As required, Management makes informed judgments and prepares the most appropriate estimates of the outcome of events and transactions, with due consideration given to materiality. Financial information contained elsewhere in the Annual Report is consistent with that in the financial statements.

Management, in keeping with its responsibilities, maintains a control system, designed among other things to provide reasonable assurance that the assets of Hydro-Québec are adequately recorded and safeguarded and that the accounting records form an appropriate basis for the preparation of reliable financial statements. An internal auditing process allows evaluation of the sufficiency and efficiency of control, as well as of Hydro-Québec's policies and procedures. Recommendations ensuing from this process are submitted to Management and the Audit Committee.

The Board of Directors assumes its responsibility for the consolidated financial statements principally through its Audit Committee, composed solely of directors who do not hold full-time positions within the Corporation or in one of its subsidiaries. This committee's mandate is to ensure that the financial statements present fairly Hydro-Québec's financial position, the results of its operations and its cash flows. The Audit Committee meets regularly with Management, the General Auditor and the external auditors to review the results of their audits and the reports on Hydro-Québec's accounting methods and policies and on the control systems. The General Auditor and the external auditors have full and unrestricted access to the Audit Committee, with or without Management's presence.

Hydro-Québec has also established a code of ethics and a code of conduct primarily to ensure the proper management of its resources and the orderly conduct of business.

The consolidated financial statements have been audited jointly by accounting firms Samson Bélair/Deloitte & Touche and PricewaterhouseCoopers in accordance with generally accepted auditing standards in Canada. Their responsibility consists in expressing their professional opinion on the fairness of the financial statements. The Auditors' Report, which appears overleaf, specifies the extent of their audit and gives their opinion on these financial statements.

In the opinion of Management, these financial statements incorporate, within reasonable limits, all important elements and data available at February 21, 2000.

L. Jacques Ménard Chairman of the Board André Caillé President and Chief Executive Officer Daniel Leclair Vice President – Finance and Chief Financial Officer

Montréal, Québec February 21, 2000

## auditors' report

#### To the Minister of Finance of Québec

We have audited the consolidated balance sheet of Hydro-Québec as at December 31, 1999 and the consolidated statements of operations, retained earnings and cash flows for the year then ended. These financial statements are the responsibility of Hydro-Québec'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 in Canada. 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 consolidated financial statements present fairly, in all material respects, the financial position of Hydro-Québec as at December 31, 1999 and the results of its operations and its cash flows for the year then ended in accordance with generally accepted accounting principles in Canada as described in note 1. As required by the Auditor General Act (R.S.Q., c. V-5.01), we report that, in our opinion, these principles have been applied on a basis consistent with that of the preceding year.

Samson Belaix

**Chartered Accountants** 

Pricewaterhouseloopers Ilp **Chartered Accountants** 

Montréal, Québec February 21, 2000

# consolidated statement of operations

## For the year ended December 31

(in millions of dollars)	Notes	1999	1998
Revenue		9,579	8,812
Expenditure			
Operations		1,912	1,681
Electricity and fuel purchased		1,109	899
Depreciation, amortization and decommissioning	3	1,731	1,589
Taxes	4	789	799
		5,541	4,968
Operating income		4,038	3,844
Financial expenses	5	3,119	3,154
Income before non-controlling interest		919	690
Non-controlling interest		13	11
Net income		906	679

# consolidated statement of retained earnings

# For the year ended December 31

(in millions of dollars)	Notes	1999	1998
Balance at beginning of year Net income		8,914 906	8,514 679
Dividends	16	9,820 453	9,193 279
Balance at end of year		9,367	8,914

# consolidated balance sheet

As at December 31

(in millions of dollars)	Notes	1999	1998
ASSETS			
Fixed assets	6	48,226	48,042
Current assets			
Cash and investments		488	295
Accounts receivable		1,874	1,824
Financial assets related to debt		191	179
Materials, fuel and supplies		381	270
		2,934	2,568
Other long-term assets			
Investments	7	652	451
Deferred charges	8	3,874	4,933
Financial assets related to debt	9	418	691
Other assets	10	681	610
		5,625	6,685
		56,785	57,295
LIABILITIES AND EQUITY			
Long-term debt	11	35,961	37,623
Current liabilities		40-	
Borrowings		107	59
Dividends payable		453	279
Accounts payable		1,236	1,001
Accrued interest		1,276	1,408
Current portion of long-term debt		2,598	2,496
		5,670	5,243
Other long-term liabilities	12	671	457
Perpetual debt	13	552	552
Non-controlling interest		190	132
Shareholder's equity	16		
Share capital		4,374	4,374
Retained earnings		9,367	8,914
		13,741	13,288
		56,785	57,295

Yvon Lamontagne

Chairman of the Audit Committee

L. Jacques Ménard Chairman of the Board

# consolidated statement of cash flows

For the year ended December 31

(in millions of dollars)	Notes	1999	1998
Operating activities			
Net income		906	679
Depreciation of fixed assets		1,538	1,383
Amortization of deferred charges		382	399
Change in non-cash working capital items	17	105	(118)
Other		(47)	(118)
		2,884	2,225
Investing activities			
Fixed assets		(1,642)	(2,092)
Acquisition of joint ventures	15	(95)	_
Long-term investments		(216)	(160)
Net change in short-term investments		(129)	49
Other		(145)	(74)
		(2,227)	(2,277)
Financing activities			
Issue of long-term debt		2,302	1,295
Maturity of long-term debt and sinking fund redemption		(2,279)	(1,400)
Repayment in advance of long-term debt		(406)	(48)
Receipts resulting from credit risk management		25	427
Net change in short-term borrowings		40	_
Dividends paid		(279)	(357)
Other		7	71
		(590)	(12)
Net change in cash and cash equivalents		67	(64)
Cash and cash equivalents at beginning of year		33	97
Cash and cash equivalents at end of year		100	33

Supplementary information		
Interest paid	3,004	3,086

Cash and cash equivalents comprise cash and liquid short-term investments with maturities generally less than or equal to three months from the date of acquisition.

In 1999, operations not affecting cash mainly include a disposal of fixed assets in exchange for equity securities valued at \$35 million.

## **Notes to Consolidated Financial Statements**

Tabular amounts are expressed in millions of dollars, unless otherwise indicated.

# SIGNIFICANT ACCOUNTING POLICIES

Under the provisions of its Act, the publicly owned corporation Hydro-Québec (the "Corporation") is mandated to supply power and to pursue endeavors in energy-related research and promotion, energy conversion and conservation, and any field connected with or related to power or energy.

The consolidated financial statements have been prepared in accordance with generally accepted accounting principles in Canada and take into account generally accepted accounting methods and practices of regulatory bodies. The regulatory accounting practices adopted by the Corporation, which differ from the accounting practices otherwise applied in unregulated enterprises, are in particular related to certain deferred charges, including those concerning major projects canceled or postponed and personnel reduction and renewal measures, as well as depreciation of fixed assets disposed of and of fixed assets written off subsequent to a review of their useful life.

#### Consolidation

The consolidated financial statements include the accounts of the Corporation and the companies in which it holds an interest, including its subsidiaries, all of which are wholly owned (collectively "Hydro-Québec"). The interests in jointly controlled enterprises, that is, joint ventures, are accounted for using the proportionate consolidation method. Investments in companies over which Hydro-Québec can exercise a significant influence are accounted for on an equity basis, while other long-term investments are recorded at cost.

#### Goodwill

The excess of the cost of the investments in joint ventures over the share of the net assets acquired is recorded as consolidated goodwill and amortized on a straight-line basis over a period not exceeding 40 years. Each year, Hydro-Québec reviews the book value of goodwill to determine if there has been a permanent impairment in value by measuring the estimated fair value of the investments using the discounted cash flow method.

#### Regulation

Under the Act respecting the Régie de l'énergie, assented to on December 23, 1996, the Régie de l'énergie has exclusive jurisdiction to determine or modify the rates and conditions under which electricity is transmitted or supplied by Hydro-Québec. With the exception of Section 52, the sections of the Act relating to rate determination came into force on May 2, 1998.

The joint venture Noverco inc. wholly owns Gaz Métropolitain, inc., whose main subsidiary, Gaz Métropolitain and Company, Limited Partnership, is involved primarily in the distribution of natural gas by pipeline. Most aspects of its operations are monitored and controlled by the Régie de l'énergie.

Revenue from sales of electricity is recorded on the basis of cyclical billings and also includes revenue accrued in respect of electricity delivered but as yet unbilled.

# Foreign currency translation

Revenue and expenditure resulting from transactions in foreign currencies are translated into the Canadian dollar equivalent at exchange rates in effect at the transaction date. Monetary assets and liabilities are translated into Canadian dollars at exchange rates in effect at the balance sheet date, and non-monetary items are translated into Canadian dollars at exchange rates in effect at the transaction date.

The exchange gains or losses resulting from the translation of current monetary items are included in the consolidated statement of operations. Those resulting from the translation of long-term monetary items are deferred and amortized on a straight-line basis over the remaining term of the debt securities, except when they relate to debt securities hedged by future revenue streams in United States dollars, in which case they are deferred until the date of repayment of such debt.

Currency swaps used to manage exchange risks related to the repayment of the principal amount of long-term debt are presented at rates in effect at the balance sheet date. Those that constitute financial assets are presented as Financial assets related to debt, while those representing financial liabilities are presented as Long-term debt. Gains or losses on these currency swaps are deferred and amortized on a straight-line basis over their remaining terms.

# SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Fixed assets

Fixed assets are carried at cost, which comprises materials, labor, other costs directly contributing to construction activities and borrowing costs capitalized during construction. Capitalized borrowing costs are based on the previous year's average cost of long-term debt issued by the Corporation.

The costs of fixed assets in progress are transferred to fixed assets in service when construction is completed and the facilities are in commercial operation. As for generating facilities, the costs are transferred in installments as units of the facilities are completed and commissioned.

Fixed assets are depreciated over their useful life. Under the *Hydro-Québec Act*, the depreciation period is restricted to a maximum of 50 years. The depreciation periods for the main classes of fixed assets are as follows:

Hydraulic generation	50 years
Nuclear generation	30 years
Thermal generation (other than nuclear)	15 to 20 years
Transmission	40 to 50 years
Distribution	25 to 40 years
Administration buildings and service buildings	50 years
Construction, operating and research equipment	3 to 30 years

Fixed assets are depreciated according to the sinking fund method at the rate of 3%, with the exception of construction, operating and research equipment, which are depreciated according to the straight-line method.

Fixed assets written off subsequent to a review of their useful life are depreciated over a three-year period under the straight-line method.

Upon disposal, the cost of fixed assets and the cost of their dismantlement, net of accumulated depreciation and salvage value, are charged to a separate account and amortized over a maximum period of 10 years, according to the sinking fund method, at the rate of 3%. However, when the fixed assets are replaced, the cost of dismantlement, less the salvage value, is added to the cost of the new fixed assets and then depreciated according to the method appropriate to the new asset.

#### **Short-term investments**

Short-term investments are shown at amortized cost. The book value of the investments approximates their fair value.

## **Deferred charges**

# Marketing programs

Deferred charges related to marketing programs are amortized on a straight-line basis over a period that does not exceed five years after the year in which they were incurred.

## Development expenses

Deferred development expenses are amortized on a straight-line basis over a period of five years after the year in which they were incurred.

## Cancellation or postponement of major projects

Project costs are reviewed periodically. Costs deemed irretrievable at the time of cancellation of a major project or its postponement to a later date are deferred and amortized on a straight-line basis over a period of three years.

# Personnel reduction and renewal measures

Since 1996, the Corporation has been taking steps to improve its profitability and competitiveness so as to strengthen its position in the changing energy sector. Accordingly, the Corporation has introduced various temporary measures to facilitate the reduction and renewal of its personnel from 1997 to 2000. The most significant of these measures are severance pay and improvements to the Pension Plan. The cost of these measures is deferred and amortized on a straight-line basis over a period of 60 months, beginning the month following each individual commitment. The amortization is recorded in Expenditure – Operations.

# SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Sinking funds

Sinking funds are created through the purchase of the Corporation's debentures, Government of Canada bonds, or bonds issued or quaranteed by the Québec government. The Corporation's debentures are deducted from long-term debt. Government issued or guaranteed bonds are presented as Financial assets related to debt.

Sinking fund securities are carried at amortized cost, a method in which the difference between the cost and the par value at maturity is amortized over the remaining term of the security. The book value of the securities does not necessarily approximate their fair value.

#### **Derivative instruments**

Hydro-Québec uses different derivative instruments to mitigate foreign exchange and interest rate risks related to long-term debt, as well as the risk of price changes in raw materials inherent in certain sales contracts for electricity.

Interest exchanges, concluded in accordance with the swap agreements used to change long-term interest rate exposure, are matched to interest expense on the borrowings to which they are related.

Derivative instruments used in the short term to manage financial risks over a period of no more than three years are recorded at cost. Gains or losses realized are deferred and charged to operations on a basis consistent with the recognition of the gains or losses of the underlying position.

#### Decommissioning of nuclear generating station

The future costs of decommissioning Gentilly-2 nuclear generating station are charged progressively to operations and reflected in Other long-term liabilities. These estimated costs essentially consist of the cost of dismantlement and the cost for final disposal of the irradiated fuel.

The Corporation revises these costs periodically based on the various assumptions and estimates underlying the calculations, possible technological advances and changes in the standards and regulations governing the decommissioning of nuclear generating stations.

# Reclassification

Some figures of the previous year have been reclassified in order to respect the presentation adopted in the current year. Comparative figures presented in the consolidated statement of cash flows have been restated following the adoption of the new accounting standard applicable to this statement.

# CHANGE IN AN ACCOUNTING POLICY

During the year, the Corporation adopted the new Canadian standards for employee future benefits. The resulting recommendations have been applied prospectively. They cover various benefits vested to the employees during their working career, and which are provided to them when they are no longer in active service, pursuant to an undertaking by the Corporation. Had these recommendations not been adopted, the pension plan expense would have been approximately \$22 million, and the expense for other plans would have been approximately \$62 million.

# 3 DEPRECIATION, AMORTIZATION AND DECOMMISSIONING

	1999	1998
Depreciation of fixed assets	1,538	1,383
Amortization of marketing programs	58	73
Amortization of major projects canceled or postponed	44	63
Write-off of projects	7	7
Decommissioning of nuclear generating station	10	9
Other	74	54
	1,731	1,589

# 4 TAXES

	1999	1998
Capital tax	320	334
Tax on gross revenue as municipal real estate tax on certain immovables	211	216
Loan guarantee fees	197	189
Municipal, school and other taxes	61	60
	789	799

# 5 FINANCIAL EXPENSES

	1999	1998
Interest		
Interest on debt securities	3,174	3,272
Amortization of borrowing discount and expenses	54	56
	3,228	3,328
Less		
Capitalized borrowing costs	198	165
Net investment income	45	145
	243	310
	2,985	3,018
Exchange loss	134	136
	3,119	3,154

# 6 FIXED ASSETS

	1999			
	In service	Accumulated depreciation	In progress	Total
Generation				
Hydraulic	23,743	4,693	2,302	21,352
Nuclear	1,630	655	15	990
Thermal, other than nuclear	1,121	552	26	595
	26,494	5,900	2,343	22,937
Transmission				
Substations	10,093	2,304	508	8,297
Lines	7,348	1,350	315	6,313
Sundry	291	82	93	302
	17,732	3,736	916	14,912
Distribution				
Substations	71	39	7	39
Lines	7,753	1,840	204	6,117
Sundry	1,480	562	9	927
	9,304	2,441	220	7,083
Other				
Administration buildings and service buildings	1,731	377	7	1,361
Construction, operating and research equipment	1,877	1,191	100	786
Sundry	1,632	648	163	1,147
	5,240	2,216	270	3,294
	58,770	14,293	3,749	48,226

	1998			
	In service	Accumulated depreciation	In progress	Total
Generation				
Hydraulic	23,413	4,318	2,204	21,299
Nuclear	1,629	596	10	1,043
Thermal, other than nuclear	1,066	465	10	611
	26,108	5,379	2,224	22,953
Transmission				
Substations	10,062	2,057	330	8,335
Lines	7,189	1,260	325	6,254
Sundry	124	46	73	151
	17,375	3,363	728	14,740
Distribution				
Substations	85	48	11	48
Lines	7,724	1,672	97	6,149
Sundry	1,329	502	23	850
	9,138	2,222	131	7,047
Other				
Administration buildings and service buildings	1,709	324	13	1,398
Construction, operating and research equipment	1,645	1,040	132	737
Sundry	1,704	658	121	1,167
	5,058	2,022	266	3,302
	57,679	12,986	3,349	48,042

As at December 31, 1999, the Corporation has cumulative costs related to suspended draft-design projects amounting to \$553 million, recorded under Fixed assets in progress. The Corporation has therefore ceased capitalizing the related borrowing expenses.

Given the longer timeframe for completing some of these projects, the Corporation periodically reviews the costs accumulated for these projects.

During such reviews, Management must use estimates and make assumptions that have an impact on the amounts shown for draftdesign projects at the balance sheet date. Such projects are assessed in terms of profitability based on prevailing market conditions at the time of their commissioning, compliance with sustainable development principles and how well local communities receive them. A significant change in the assessment of these criteria could result in a reduction of the balance for draft-design projects.

# INVESTMENTS

	1999	1998
At cost		
Noverco inc. (note 15)		
Notes <sup>a</sup>	91	126
Churchill Falls (Labrador) Corporation Limited <sup>b</sup> (note 19)		
Bonds <sup>c</sup>	61	62
Common shares <sup>b</sup>	_	34
Other	152	110
	304	332
At equity		
Enbridge Inc.	193	119
Churchill Falls (Labrador) Corporation Limited <sup>b</sup> (note 19)	33	_
Connexim, Limited Partnership	40	_
Meiya Power Company Limited	82	_
	348	119
	652	451

a) Subordinate debentures, interest rate based on the annual average rate of Government of Canada bonds with terms of over 10 years plus 4.45%, due in 2031, redeemable.

b) On June 18, 1999, the Corporation and Churchill Falls (Labrador) Corporation Limited [CF(L) Co] signed a shareholders' agreement, under which the Corporation can exercise significant influence over the activities of CF(L) Co. Since that date, the Corporation has changed, on a prospective basis, the accounting approach for this investment from the cost to the equity method.

c) General mortgage,  $7\frac{1}{2}$ %, due 2000 through 2010 (par value of \$67 million in 1999 and \$68 million in 1998).

# 8 DEFERRED CHARGES

	1999	1998
Deferred charges related to debt <sup>a</sup>	2,634	3,981
Employee future benefit asset (note 18)	466	365
Marketing programs	100	142
Development expenses	109	107
Major projects canceled or postponed	87	_
Personnel reduction and renewal measures	151	178
Other	327	160
	3,874	4,933

a) Mainly comprises a deferred exchange loss of \$2,517 million (\$3,852 million as at December 31, 1998).

# 9 FINANCIAL ASSETS RELATED TO DEBT

	1999	1998
Currency swaps	378	868
Sinking funds	231	2
	609	870
Less		
Current portion	191	179
	418	691

# 10 OTHER ASSETS

	1999	1998
Goodwill Government reimbursement for the 1998 ice storm <sup>a</sup>	291 390	203 407
	681	610

a) Corresponds to the reimbursement of the cost of emergency measures, an amount of \$186 million, receivable in 2002, and the compensation payments, from 2001 to 2007, for the net cost of restoring the system, an amount of \$204 million (\$182 million and \$225 million, respectively, as at December 31, 1998).

# LONG-TERM DEBT

# **Composition and maturities**

Debentures, other long-term debt and currency swaps representing financial liabilities, translated into Canadian dollars at the exchange rates in effect at the balance sheet date, are summarized in the following table. These amounts are presented by year of maturity, and take into account the requirements of the sinking funds.

						1999	1998
		Debt of th	e Corporation		Subsidiaries		
Year of	Canadian	United States	Other		and joint		
maturity	dollars	dollars	currencies	Total	ventures	Total	Total
1999	_	_	_	_		_	2,496
2000	905	753	902	2,560	38	2,598	2,716
2001	1,676	709	1,085	3,470	22	3,492	3,600
2002	534	1,839	425	2,798	29	2,827	3,025
2003	1,028	1,033	272	2,333	300	2,633	2,532
2004	1,087	2	54	1,143	11	1,154	_
1 to 5 years	5,230	4,336	2,738	12,304	400	12,704	14,369
6 to 10 years	2,812	2,365	1,686	6,863	304	7,167	8,259
11 to 15 years	1,696	1,911	122	3,729	32	3,761	3,869
16 to 20 years	111	938	531	1,580	84	1,664	1,636
21 to 25 years	4,537	2,865	_	7,402	_	7,402	7,624
26 to 30 years	3	2,266	_	2,269	83	2,352	1,026
31 to 35 years	1,041	1,443	_	2,484	_	2,484	2,924
36 years and over	1,025	_	_	1,025	_	1,025	412
	16,455 <sup>a</sup>	16,124	5,077	37,656	903	38,559	40,119
Less							
Current							
portion	905	753	902	2,560	38	2,598	2,496
	15,550	15,371	4,175	35,096	865	35,961	37,623

a) Includes \$91 million and \$202 million in zero-coupon bonds, shown at their discounted value at an interest rate compounded semi-annually of 10.95% and 10.67% respectively. Their par value will reach \$282 million and \$1,729 million in 2010 and 2020 respectively. Other bonds, shown at their discounted value and amounting to \$909 million, will reach a par value of \$1,181 million on maturity.

The debentures of the Corporation are guaranteed by the Québec government. Other long-term debt of the Corporation, which is not guaranteed by the government, totals \$231 million as at December 31, 1999 (\$250 million as at December 31, 1998).

# 1 1 LONG-TERM DEBT (CONTINUED)

# Allocation of debt by currency at time of issue and impact of financial assets related to debt

The following table summarizes long-term debt, including the current portion, in Canadian dollars and currency units. Also shown are the effects of currency swaps and sinking funds allocated to repay debt, which are presented on the balance sheet under Financial assets related to debt.

				1999	1998
	Long-te	erm debt	Financial assets related to debt		
	In Canadian dollars and currency units	At the closing exchange rates at the balance sheet date <sup>a</sup>	Currency swaps and sinking funds	Total	Total
Debt of the Corporation Canadian dollars	16,455	16,455	(231)	16,224	15,411
United States dollars <sup>b</sup>	11,111	16,124	(96)	16,028	17,923
Other currencies <sup>c,d</sup> Japanese yen Deutsche marks Pounds sterling Swiss francs French francs Euros Belgian francs	75,500 2,074 400 546 2,500 — 1,000	1,115 1,728 991 568 629 — 46 5,077	(140) (101) (5) (33) — — (3) (282)	975 1,627 986 535 629 — 43	1,008 1,864 1,038 540 668 157 43
Subsidiaries and joint ventures <sup>e</sup>		37,656 903	(609)	37,047 903	38,652 597
		38,559	(609)	37,950	39,249

a) Includes \$540 million of financial liabilities comprised of currency swaps (\$395 million as at December 31, 1998).

b) These repayments are 77% hedged by future revenue streams in United States dollars and 2% by currency swaps (79% and 6% as at December 31, 1998).

c) These repayments are 53% hedged by currency swaps that translate the repayments into Canadian dollars and 41% hedged by currency swaps that translate the repayments into United States dollars (55% and 39%, respectively, as at December 31, 1998).

d) The introduction of the euro on January 1, 1999 led to the translation into euros of debt previously denominated in ECUs. No other debt has yet been translated into euros.

e) Comprising 694 million in Canadian dollars, 154 million in United States dollars, 18 million in Australian dollars and 37 million in Senegalese francs (534 million in Canadian dollars, 47 million in United States dollars and 16 million in Australian dollars as at December 31, 1998).

# 11 LONG-TERM DEBT (CONTINUED)

# Allocation of debt by currency at time of issue and at time of repayment

The following table shows the allocation of debt, net of sinking funds, converted into Canadian dollars after taking the swaps into account, according to the currency at time of issue and the currency at time of repayment.

	199	1999		98
	At time	At time of	At time	At time of
	of issue	repayment	of issue	repayment
Debt of the Corporation				
Canadian dollars	16,224	17,881	15,411	18,160
United States dollars	16,028	18,869	17,923	20,156
Other currencies	4,795	297	5,318	336
	37,047	37,047	38,652	38,652
Debt of the subsidiaries and joint ventures				
Canadian dollars	694	712	534	550
United States dollars	154	154	47	47
Other currencies	55	37	16	_
	903	903	597	597
	37,950	37,950	39,249	39,249

# Interest rates

The interest rates of Hydro-Québec presented in the following table take into account nominal interest rates on borrowings, the related discounts and expenses, as well as the effect of interest rate swaps.

	1999			1998	
Year of maturity	Canadian dollars	United States dollars	Other currencies	Weighted average	Weighted average
1 to 5 years	7.26	7.30	7.39	7.30	8.03
6 to 10 years	6.42	8.17	6.08	6.89	7.15
11 to 15 years	10.56	9.80	14.93	10.30	10.14
16 to 20 years	10.23	8.65	4.61	7.51	7.29
21 to 25 years	10.68	9.24	_	10.14	9.83
26 to 30 years	7.19	8.72	_	8.62	8.63
31 to 35 years	6.87	9.69	_	8.54	9.29
36 years and over	5.93	_	_	5.93	5.36
Weighted average	8.83	8.97	6.27	8.71	8.80

The variable-rate portion of Hydro-Québec's debt amounts to 25.0%, or 26.1% after perpetual debt, as at December 31, 1999 (28.6%, or 29.6% after perpetual debt, as at December 31, 1998). For information purposes, a change of 1% in the interest rate would change net income by \$100 million (\$118 million in 1998), not including the impact of derivative instruments used to manage short-term financial risk (note 14).

#### **Fair value**

As at December 31, 1999, the fair value of Hydro-Québec's debt, net of sinking funds and after taking the swaps into account, amounts to \$43,671 million (\$48,984 million as at December 31, 1998).

Fair value is obtained by discounting future cash flows, based on term and closing interest rates as at the balance sheet date for similar instruments available on financial markets. The fluctuation in the fair value is explained by its sensitivity to financial market interest rates. However, Management intends to retain these debt securities until maturity. Therefore, as at December 31, 1999, Hydro-Québec did not foresee any significant debt repayments that could result in the realization of this fair value.

# 11 LONG-TERM DEBT (CONTINUED)

Hydro-Québec has undrawn revolving standby credits totaling U.S.\$1,800 million which expire between 2001 and 2003. Any borrowing under these lines of credit will bear interest at a rate based on the Eurodollar London Interbank Offered Rate (LIBOR).

# **12** OTHER LONG-TERM LIABILITIES

	1999	1998
Accounts payable	324	164
Employee future benefit liability (note 18)	272	228
Decommissioning of nuclear generating station	75	65
	671	457

# 13 PERPETUAL DEBT

Perpetual notes in the amount of U.S.\$400 million bear interest at a rate reset semi-annually based on LIBOR. They are guaranteed by the Québec government and are redeemable. These notes are shown on the balance sheet at the exchange rate in effect as at the date of issue (\$577 million at the exchange rate in effect at the balance sheet date, an amount that approximates fair value). As at December 31, 1999 and 1998, the LIBOR for perpetual notes was 6.06% and 5.69%, respectively.

# 14 DERIVATIVE INSTRUMENTS

Derivative instruments used by Hydro-Québec are always associated with a reverse risk position.

Hydro-Québec concludes currency swaps in order to manage the foreign exchange risk associated with repayments of principal on long-term debt and with interest payments. Some of these currency swaps allow for interest rate exchanges to change long-term exposure to interest rate risk. Interest rate swaps that do not allow for exchanges of principal are also used to manage this risk.

The valuation of these swaps, with terms through 2017, shows a positive fair value of \$71 million (\$1,367 million as at December 31, 1998).

The following table shows the notional amount of these swaps expressed in Canadian dollars or in other currencies.

	1999	1998
Canadian dollars	(1,676)	(2,732)
United States dollars	(1,962)	(1,458)
Other currencies		
Japanese yen	75,500	77,000
Deutsche marks	1,956	2,244
Pounds sterling	310	310
Swiss francs	547	547
French francs	2,500	2,500
Euros	_	125
Belgian francs	1,000	1,000
Australian dollars	19	18

Data in brackets represent amounts to be paid.

# 14 DERIVATIVE INSTRUMENTS (CONTINUED)

In managing short-term financial risks, Hydro-Québec makes continual comprehensive evaluations of the impact of variations in exchange rates, interest rates and prices of raw materials. In this respect, Hydro-Québec held options and forward contracts designed to hedge several positions. The fair value of these instruments is presented by specific risk in the following table. These derivative instruments mature in or prior to March 2001.

The fair value of derivative instruments reflects the amount that Hydro-Québec would receive (financial assets) or pay (financial liabilities) as at the balance sheet date in terminating these instruments.

	1999	1998
Exchange risk		
Forward exchange contracts, options and swaps		
Financial assets	1	7
Financial liabilities	(50)	(8)
	(49)	(1)
Interest rate risk		
Forward rate agreements, options and swaps		
Financial assets	14	1
Financial liabilities	(2)	_
	12	1
Risk of price change in raw materials		
Forward contracts, options and swaps		
Financial assets	1	16
Financial liabilities	(34)	(8)
	(33)	8
	(70)	8

The fair value of derivative instruments is determined based on the spot rates or forward rates or prices in effect at market closing as at the balance sheet date. Without this information for a given instrument, Management refers to the available forward rate or price for an equivalent instrument. Different valuation models recognized by financial markets are used to estimate the fair value of options.

### **Credit risk**

Derivative instruments include an element of risk, since a counterparty might not meet its obligations. However, this risk is moderate as Hydro-Québec deals only with Canadian and international financial institutions with high credit ratings. Credit risk exposure is also reduced by applying a credit policy that limits credit risk concentrations. As at December 31, 1999, Hydro-Québec did not foresee incurring any loss due to counterparty default.

# 15 INTERESTS IN JOINT VENTURES

The share of the principal joint venture items included in the consolidated financial statements is presented in the following table. These joint ventures include the interest in Noverco inc. and the Corporation's interests in various foreign joint ventures through Hydro-Québec International inc. (HQI).

	1999	1998
Operations		
Revenue	728	520
Expenditure and financial expenses	645	478
Non-controlling interest	17	11
Share of net income	66	31
Balance sheet		
Current assets	147	109
Long-term assets	1,539	959
Current liabilities	226	136
Long-term liabilities	872	562
Non-controlling interest	182	129
Share of net assets	406	241
Cash flows		
Operating activities	115	72
Investing activities	(387)	(238)
Financing activities	190	164
Share of the decrease in cash and cash equivalents	(82)	(2)

## Noverco inc.

As at December 31, 1999, Hydro-Québec holds 41% of the outstanding common shares of Noverco inc. and options on an additional 9%. Under the Noverco inc. shareholders' agreement, the Corporation agreed to mechanisms enabling the joint owners to convert their interests into liquidities under certain conditions.

## Foreign joint ventures

As at December 31, 1999, the Corporation holds interests in joint ventures through HQI. These joint ventures are essentially involved in the construction, ownership and operation of hydroelectric generating stations and transmission and distribution systems. They mainly operate in South and Central America, as well as in Africa and Australia.

During the year, HQI acquired interests in foreign joint ventures for a total cash amount of \$95 million, representing consolidated goodwill of \$51 million and net assets of \$44 million. These acquisitions are recorded using the purchase method, and the results of the joint ventures are included in the consolidated results from the acquisition dates.

# 16 SHAREHOLDER'S EQUITY

The authorized share capital comprises 50,000,000 shares with a par value of \$100 each, and 43,741,090 shares were issued and paid.

Under the Hydro-Québec Act, any dividends to be paid by the Corporation are declared once a year by the Québec government, which also determines the terms and conditions of payment. For a given financial year, they cannot exceed the distributable surplus, equal to 75% of operating income and the year's net investment income, less interest on debt securities and amortization of borrowing discount and expenses. This calculation is made on the basis of the consolidated financial statements.

# 16 SHAREHOLDER'S EQUITY (CONTINUED)

However, in respect of a given financial year, no dividend may be declared in an amount that would have the effect of reducing the rate of capitalization to less than 25% at the end of the year. The government declares the dividends for a given year within 30 days after the transmission by the Corporation to the government of the financial data relative to the distributable surplus. On expiry of the time prescribed, any distributable surplus or part thereof that has not been subject to a dividend declaration may no longer be distributed to the shareholder as a dividend.

For 1999, the Québec government declared dividends of \$453 million, which is less than the maximum permitted.

Dividends declared are deducted from the retained earnings of the year for which they were declared.

# 17 CHANGE IN NON-CASH WORKING CAPITAL ITEMS

	1999	1998
Accounts receivable	(49)	(95)
Materials, fuel and supplies	(111)	(30)
Accounts payable	397	(47)
Accrued interest	(132)	54
	105	(118)

# 18 EMPLOYEE FUTURE BENEFITS

The Corporation offers all its employees a contributory defined benefit pension plan, based on final pay. The Corporation's pension plan (the "Pension Plan") is a funded plan that ensures post-retirement benefits based on number of years of service and average five best years of earnings. The Corporation also offers its active and retired employees other employee benefits including group life, medical and hospitalization, and salary insurance plans. However, with the exception of the long-term disability salary insurance plan, for which amounts are set aside with the insurer to guarantee benefit payments to beneficiaries, these plans are unfunded.

The cost of pension benefits and other retirement benefits provided in exchange for services rendered during the year is calculated using the projected benefit method prorated on years of service, and is based on best estimate economic and demographic assumptions, according to Management.

The following tables present information concerning the defined benefit plans, established by independent actuaries:

	Pension Plan 1999	Other plans 1999
Accrued benefit obligation		
Balance at beginning of year	5,938	499
Current service cost	166	18
Benefit payments and refunds	(367)	(24)
Interest on obligation	353	29
Actuarial gains	(439)	(62)
Adjustments arising from plan amendments	306	_
Adjustments arising from personnel reduction programs	31	_
Balance at end of year	5,988	460

# 18 EMPLOYEE FUTURE BENEFITS (CONTINUED)

	Pension Plan 1999	Other plans 1999
Plan assets at fair value		
Balance at beginning of year	8,304	29
Actual return on plan assets during the year	995	1
Employee contributions (paid and deemed paid) <sup>a</sup>	30	_
Hydro-Québec contributions	14	4
Benefit payments and refunds	(367)	(3)
Administrative fees	(18)	_
Balance at end of year	8,958	31
Surplus (deficit) at end of year Unamortized past service $costs^b$ Unamortized net $gain^c$ Unamortized transitional obligation (asset) $^b$ Unamortized adjustments arising from personnel reduction programs $^d$ Accrued benefit asset (liability)	2,970 300 (905) (2,129) 230 466	(429) — (62) 209 10 (272)
Significant actuarial assumptions (%)		
Discount rate as at January 1, 1999	5.95	5.95
Discount rate as at December 31, 1999	7.17	7.17
Expected rate of return on plan assets <sup>e</sup>	6.49	5.30
Salary escalation rate <sup>f</sup>	2.23	-

Health-care costs are based on assumed average increases of 8.6% over the next ten years for participants aged 65 and under, and 6.5% for participants over 65 years of age. After that time, assumed average increases are 4% for participants aged 65 and under, and 3.5% for participants over 65 years of age.

- a) The value of the contribution holiday granted to employees is amortized on a straight-line basis over the employees' expected average remaining service life.
- b) Past service costs arising from plan amendments and transitional balances relating to the Pension Plan and other defined retirement benefits as at January 1, 1999 are amortized on a straight-line basis over the employees' expected average remaining service life. The transitional obligation relating to post-employment benefits (salary insurance benefits) is amortized on a straight-line basis over a period of five years.
- c) Amortization of actuarial gains or losses is recognized in the expense for the year if the unamortized net actuarial gain or loss at the beginning of the year exceeds 10% of the value of the accrued benefit obligation or 10% of the market-related value of the assets of the plan fund, whichever is greater. Amortization corresponds to the excess divided by employees' expected average remaining service life.
- d) Adjustments arising from personnel reduction programs are amortized on a straight-line basis over a period of 60 months, beginning the month following each individual commitment.
- e) The expected return on pension plan assets is based on a market-related value determined by using a five-year moving average for equity securities held, and by valuing other asset classes at their fair value.
- f) This rate is a weighted average which takes into account salary increases as well as promotion opportunities while in service.

# 18 EMPLOYEE FUTURE BENEFITS (CONTINUED)

The plan assets include certain securities issued by the Corporation and its related companies. These securities are grouped under the following asset classes:

	Pension	Other
	Plan	plans
		•
	1999	1999
Bonds and debentures	532	_
Shares	17	_
Short-term investments	10	30
	559	30
Plan expense (credit)		
Current service cost <sup>a</sup>	166	18
Administrative fees <sup>b</sup>	18	_
Employee contributions (paid and deemed paid) <sup>c</sup>	(30)	_
Interest on obligation	353	29
Interest on assets	(529)	(1)
Amortization of transitional obligation (asset)	(152)	16
Amortization of adjustments arising from personnel reduction programs	82	3
Amortization of past service costs	6	_
Expense (credit) for the year	(86)	65

- a) For post-employment benefits included under Other Plans, current service cost corresponds to the cost of new disability cases for the year.
- b) Administrative fees chargeable to the Pension Plan are fully billed by the Corporation.
- c) Contributions deemed paid represent the value of the contribution holiday granted to employees for the year, that is, \$11 million.

The Corporation and most of its employees have benefited since May 10, 1999 from a Pension plan contribution holiday. Several amendments with a material effect on the obligation of the Pension Plan have also been the subject of agreements between the Corporation and the unions over the year. These amendments are mainly improvements to retirement benefits, including the extension to 2003 of the "80 clause", where 80 is the total of age and years of contribution, the introduction of a bridging benefit calculated on service up to 2003 and payable as of the date of retirement up to age 65, the buyback of non-contribution periods up to a maximum of \$50 million, and the inclusion in the definition of pensionable earnings of lump sums paid under the profitsharing plan as well as corporate programs related to performance management.

Also, the Pension Plan and the pension plans of the following subsidiaries have been merged as at January 1, 1999: the Régime de retraite des employés de la Compagnie d'électricité du Sud du Canada Ltée, the Régime de retraite des employés de la Compagnie d'électricité du Nord du Québec Limitée, the Régime de retraite des employés de la Compagnie électrique du Saguenay and the Régime de retraite des employés de la Compagnie du Pouvoir du Bas St-Laurent. This merger was designed to streamline management of the plans, and has no financial consequences for the Corporation.

Certain changes were also made in 1999 to the life insurance, salary insurance, and medical and hospitalization insurance plans. These changes have been in effect since November 1, 1999 for managers, non-unionized employees and engineers who are members of the Syndicat professionnel des ingénieurs d'Hydro-Québec (Hydro-Québec engineers' union). They are mainly additions that afford greater flexibility in terms of coverage offered, without, however, significantly changing the cost of these plans.

# 19 COMMITMENTS AND CONTINGENT LIABILITIES

## **Electricity purchased**

On May 12, 1969, the Corporation signed a contract with CF(L)Co whereby the Corporation undertook to purchase substantially all the energy generated at Churchill Falls generating station, which has a nominal capacity of 5,428 MW. Under this agreement, the Corporation could be required to provide additional funding to service the debt of CF(L)Co and to pay its expenses should CF(L)Co be unable to do so. Expiring in 2016, this contract will be automatically renewed for a further 25 years in accordance with existing terms and conditions. On June 18, 1999, the Corporation and CF(L)Co also entered into a contract to guarantee the availability of 682 MW of additional power until 2041 for the November 1 to March 31 winter period.

On May 28, 1990, the Corporation signed a firm power purchase contract with New Brunswick Power Corporation to provide the Corporation with blocks of power of up to 300 MW between 1998 and 2002, and 200 MW between 2002 and 2011.

On April 13, 1999, the Corporation signed an energy purchase agreement with PG&E Energy Trading-Power, L.P. for 2,850 GWh, to be delivered from 2001 until 2004.

As at December 31, 1999, the Corporation has signed contracts with 66 independent power producers for a potential capacity of 435 MW. The Corporation expects to purchase approximately 379 MW of power and energy annually over the initial term of these contracts, which extend through 2024. The majority of these contracts include renewal clauses.

Taking all the electricity purchase contracts into account, the Corporation expects to make the following minimum payments in each of the next five years:

Year	Payment
2000	320
2001	345
2002	350
2003	346
2004	342

#### **Energy storage**

The Corporation entered into energy storage agreements for a potential of approximately 11.3 TWh. These agreements cover periods ranging from 1 to 5 years and extend through 2004. As at December 31, 1999, the Corporation received approximately 4 TWh, which, under these agreements, must be returned. Certain provisions enable the Corporation and/or the counterparty to convert certain energy storage contracts into energy purchase/sale contracts.

#### Guarantees

Hydro-Québec has guaranteed loans for an amount of \$548 million as at December 31, 1999.

# **Projected capital expenditures**

The Corporation projects capital expenditures amounting to \$1,951 million for 2000.

A joint venture held through HQI obtained a contract for the construction and operation of an interconnection line. It committed to complete construction by August 2000. Late completion would result in substantial penalties and possible loss of the concession. Management is confident that construction will be completed on time.

In the normal course of business, Hydro-Québec is party to claims and legal proceedings. Management is of the opinion that their settlement will not have a material effect on the financial position or consolidated operating results of Hydro-Québec, given the provision for these items.

# 20 SEGMENTED INFORMATION

The activities of Hydro-Québec are divided into three energy-related operating segments, based on products and services: Electricity, Gas, and Expertise and Technology. These segments, determined based on management practices that support Hydro-Québec's growth and profitability orientations, have their own particular economic characteristics and differ in nature, production processes, and technology, as well as in their target customer base.

The Electricity segment is Hydro-Québec's core business and encompasses the generation, transmission and distribution of electricity.

The Gas segment comprises natural gas transmission and distribution activities, principally through an interest in Noverco inc. shares and debentures.

The Expertise and Technology segment groups together activities related to the marketing of technology and expertise developed both on the national and international stage. The information provided relates chiefly to the subsidiaries in these sectors, namely HQI, Hydro-Québec CapiTech and the holding companies Gestion Production H.Q. inc., HQ TransEnergy Inc. and Hydro-Québec Valtech inc.

The following tables contain information related to operations and assets by segment and certain geographical information.

# Segments

			1999		
		Energy			
	Electricity	Gas	Expertise and Technology	Intersegment eliminations for consolidation purposes	Total
Revenue	8,706	758	139	<b>(24)</b> <sup>a</sup>	9,579
Depreciation, amortization and decommissioning	1,664	61	6	_	1,731
Financial expenses	3,036	70	13	_	3,119
Net income (loss)	889	39	(22)	_	906
Capital expenditures	1,552	89	1	_	1,642
Total assets	54,914	1,620	299	(48)	56,785

		1998			
		Energy			
	Electricity	Gas	Expertise and Technology	Intersegment eliminations for consolidation purposes	Total
Revenue	8,192	568	71	(19) <sup>a</sup>	8,812
Depreciation, amortization and decommissioning	1,533	48	8	_	1,589
Financial expenses	3,088	50	16	_	3,154
Net income (loss)	697	15	(33)	_	679
Capital expenditures	1,984	92	16	_	2,092
Total assets	55,724	1,425	194	(48)	57,295

a) Corresponds to intersegment revenue derived essentially from Expertise and Technology.

# 20 SEGMENTED INFORMATION (CONTINUED)

# **Geographical information**

	1999		1998	
	Revenue	Fixed assets and goodwill	Revenue	Fixed assets and goodwill
Québec	8,178	48,079	7,809	48,155
Canada, outside Québec	278	_	146	_
United States	973	107	831	65
Other countries	150	331	26	25
	9,579	48,517	8,812	48,245

The amounts presented for each segment are based on the financial information used to establish the consolidated financial statements.

# consolidated financial information

(in \$M)	1999	1998	1997	1996	1995
OPERATIONS					
Revenue	9,579	8,812	8,423	7,754	7,680
Expenditure					
Operations	1,912	1,681	1,724	1,619	1,764
Electricity and fuel purchased	1,109	899	529	275	273
Depreciation, amortization					
and decommissioning	1,731	1,589	1,545	1,427	1,228
Taxes	789	799	771	760	731
	5,541	4,968	4,569	4,081	3,996
Operating income	4,038	3,844	3,854	3,673	3,684
Financial expenses	3,119	3,154	3,062	3,153	3,294
Income before non-controlling interest	919	690	792	520	390
Non-controlling interest	13	11	6	_	_
Net income	906	679	786	520	390
SUMMARY OF BALANCE SHEET Total assets	F6 70F	F7 20F	FF 107	F2 760	F2 755
Long-term debt	56,785 35,961	57,295 37,623	55,197 37,131	53,760 36,404	53,755 36,958
Shareholder's equity	13,741	13,288	12,888	12,459	11,939
Shareholder's equity	13,741	13,200	12,000	12,439	11,939
ANNUAL INVESTMENTS					
Fixed assets	1,642	2,092	1,590	2,056	2,717
Other	456	234	543	(9)	51
Total investments	2,098	2,326	2,133	2,047	2,768
FINANCIAL RATIOS			4.0-		
Interest coverage <sup>a</sup>	1.26	1.19	1.21	1.11	1.05
Capitalization (%) <sup>b</sup>	26.2	25.0	25.1	24.9	23.4
Self-financing (%) <sup>c</sup>	59.5	50.2	61.2	56.5	44.2
Return on equity (%) <sup>d</sup> Return on revenue (%) <sup>e</sup>	6.7 9.5	5.2 7.7	6.2 9.3	4.3 6.7	3.3 5.1
neturn on revenue (70)	9.5	1.7	9.3	0.7	ا.د

a) Sum of operating income and net investment income divided by gross interest expense.

Note: Throughout the Supplementary Information section, certain figures for previous years have been reclassified to reflect the presentation of the current year.

b) Shareholder's equity divided by sum of shareholder's equity, long-term debt, perpetual debt, short-term borrowings and current portion of long-term debt, less financial assets

c) Cash provided from operations less dividends paid, divided by sum of investments excluding net change in short-term investments, excluding net change in short-term investments, maturity of long-term debt and sinking fund redemption.

d) Net income divided by average shareholder's equity.

e) Net income divided by revenue.

# operating statistics – electricity

(in millions of kWh)	1999	1998	1997	1996	1995
ELECTRICITY SALES					
In Québec					
Residential and farm	49,315	47,701	51,246	50,294	48,842
General and institutional	29,765	28,815	29,560	29,158	29,108
Industrial	63,409	61,773	61,837	59,797	59,254
Other	4,500	4,519	4,648	5,261	4,832
	146,989	142,808	147,291	144,510	142,036
Outside Québec					
Long-term sales	8,711	8,101	8,072	7,819	7,645
Short-term sales	16,012	10,464	7,170	11,073	16,301
	24,723	18,565	15,242	18,892	23,946
Total sales	171,712	161,373	162,533	163,402	165,982
	T T	ı			
(in \$M)					
REVENUE FROM SALES					
In Québec					
Residential and farm	3,034	2,906	3,066	2,945	2,834
General and institutional	1,963	1,894	1,885	1,835	1,843
Industrial Other	2,233 215	2,177 213	2,162 218	2,061 226	2,041 221
Other					
	7,445	7,190	7,331	7,067	6,939
Outside Québec					
Long-term sales	427	391	350	292	255
Short-term sales	624	423	246	296	382
	1,051	814	596	588	637
Total revenue from sales	8,496	8,004	7,927	7,655	7,576
(at December 31)					
NUMBER OF CUSTOMER ACCOUNTS					
In Québec					
Residential and farm	3,206,211	3,182,033	3,157,096	3,127,136	3,099,545
General and institutional	280,383	280,067	280,396	280,570	279,447
Industrial	12,732	12,803	13,002	13,198	13,386
Other	5,986	6,066	6,222	6,308	6,525
Outside Québec	88	61	52	48	41
Total customer accounts	3,505,400	3,481,030	3,456,768	3,427,260	3,398,944
(in kWh/customer)					
AVERAGE ANNUAL CONSUMPTION					
In Québec					
Residential and farm	15,381	15,050	16,309	16,154	15,874
General and institutional	106,157	102,826	105,390	104,133	105,700
Industrial	4,980,295	4,787,677	4,720,382	4,498,721	4,464,924
Other	751,720	735,514	741,899	819,917	722,758

# operating statistics – electricity

(in thousands of kW)	1999	1998	1997	1996	1995
INSTALLED CAPACITY <sup>a</sup> Hydroelectric Thermal <sup>b</sup>	29,235 2,270	29,203 2,269	29,203 2,194	29,220 2,193	28,932 2,193
Total installed capacity	31,505	31,472	31,397	31,413	31,125

a) In addition to its own generating stations, Hydro-Québec has access to most of the generation from Churchill Falls power plant (nominal capacity 5,428 MW). Hydro-Québec also has access to the generation from two power plants in Panama and Costa Rica (nominal capacity 310 MW).

b) Includes Gentilly-2 nuclear power station (nominal capacity 675 MW).

(in millions of kWh)					
TOTAL REQUIREMENTS <sup>a</sup>	187,999	176,236	182,263	182,679	185,937

a) Includes Mc Cormick generating station but excludes generation from the facilities in Panama and Costa Rica.

(in thousands of kW)					
PEAK POWER					
REQUIREMENTS a	35,577	35,275	32,305	34,642	33,594

a) Total power requirements at annual peak for the winter beginning in December, including Mc Cormick generating station and interruptible power but excluding generation from the facilities in Panama and Costa Rica. The annual peak for winter 1999-2000 occurred at 8 a.m. on January 19, 2000.

(in km)					
LINES (OVERHEAD AND UNDERGROUND)					
Transmission and subtransmission	32,227	32,144	32,036	30,557	30,831
Distribution	105,898	105,705	104,640	104,078	102,785
	138,125	137,849	136,676	134,635	133,616

# other information

(%)	1999	1998	1997	1996	1995
RATE INCREASES Average increase at May 1 Inflation rate	0.0	1.6	1.6	1.3	0.3
	1.7	0.9	1.6	1.6	2.1
NUMBER OF EMPLOYEES <sup>a</sup> Permanent at December 31 Temporary (year's average) Women (%)	17,277	17,468	17,164	19,553	20,231
	3,126	3,379	3,252	3,767	4,621
	27.9	27.4	27.0	25.9	26.7

a) Excludes employees of subsidiaries and joint ventures.

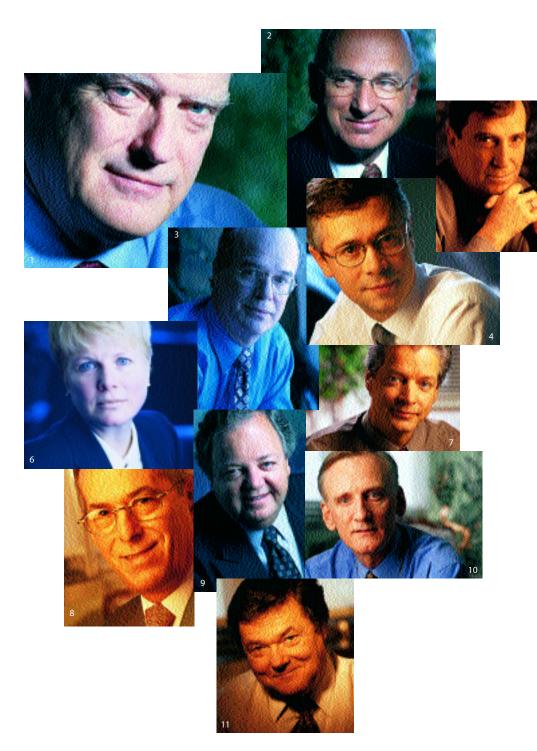
# consolidated results by quarter

(in \$M)	1st quarter	2nd quarter	3rd quarter	4th quarter	12-month period
		(audited)			
1999					
Revenue	2,688	2,099	2,121	2,671	9,579
Expenditure					
Operations	485	478	460	489	1,912
Electricity and fuel purchased	289	290	235	295	1,109
Depreciation, amortization and					
decommissioning	404	408	428	491	1,731
Taxes	205	206	197	181	789
	1,383	1,382	1,320	1,456	5,541
Operating income	1,305	717	801	1,215	4,038
Financial expenses	801	739	765	814	3,119
Income (loss) before non-controlling interest	504	(22)	36	401	919
Non-controlling interest	5	7	1	_	13
Net income (net loss)	499	(29)	35	401	906

(in \$M)	1st quarter	2nd quarter	3rd quarter	4th quarter	12-month period
	(unaudited)			(audited)	
1998					
Revenue	2,411	2,015	1,948	2,438	8,812
Expenditure					
Operations	404	460	374	443	1,681
Electricity and fuel purchased	204	196	217	282	899
Depreciation, amortization and					
decommissioning	401	395	404	389	1,589
Taxes	203	208	199	189	799
	1,212	1,259	1,194	1,303	4,968
Operating income	1,199	756	754	1,135	3,844
Financial expenses	776	786	803	789	3,154
Income (loss) before non-controlling interest	423	(30)	(49)	346	690
Non-controlling interest	5	8	_	(2)	11
Net income (net loss)	418	(38)	(49)	348	679

# teamwork and determination

"Hydro-Québec is successful because of the determination, dynamism and innovative spirit of its team members. Together we form a winning combination!" — André Caillé



1 André Caillé

President and Chief Executive Officer

2 **Yves Filion**Deputy Chief Executive Officer

**3 Daniel Leclair** 

Vice President - Finance and Chief Financial Officer

4 Thierry Vandal

Executive Vice President -Generation

5 Élie Saheb

Executive Vice President – Engineering, Procurement and Construction

6 Marie-José Nadeau

Executive Vice-President – Corporate Affairs and Secretary General

7 Roger Lanoue

Vice President – Research and Strategic Planning

8 Jean-Marie Gonthier

Vice President – Quality, Change and Human Resources

9 Michel Gourdeau

Executive Vice President -**Natural Gas Sector** 

10 Michel Clair

Vice President -**Special Projects** 

11 Daniel Lafleur

**General Auditor** 

1 Pierre Bourgie a, c, e, f Vice Chairman of the Board of Directors Hydro-Québec President and Chief Executive Officer Société financière Bourgie 1996 inc.

2 Jean-Paul Beaulieu Deputy Minister of Natural Resources Gouvernement du Québec

3 Charles G. Cavell a President and Chief Executive Officer Quebecor Printing Inc.

**4 Robert Brouillette** Senior Partner **Brouillette Charpentier Fortin** 

5 Daniel Boulard f Partner Martin, Boulard et Associés, CA

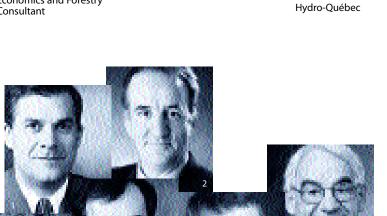
6 Éric Gourdeau b, c, g **Economics and Forestry** Consultant





President and

**Chief Executive Officer** 





- 7 Yvon Lamontagne a, b, c, e Mission Delegate to the President AXA Canada
- 8 Francine Harel Giasson b, d, e Professor École des hautes études commerciales Université de Montréal
- 9 Gérald Lemoyne Mayor of Lebel-sur-Quévillon
- 10 Serge Racine  $^{\it d}$ Chairman of the Board and Chief Executive Officer Shermag inc.
- 11 Michèle Poirier e, g President Michèle Poirier et Associés
- 12 Simon Paré b, e **Electrical Engineering Consultant**
- 13 Francine Ruest-Jutras a,d Mayor of Drummondville

# **Board Committees**

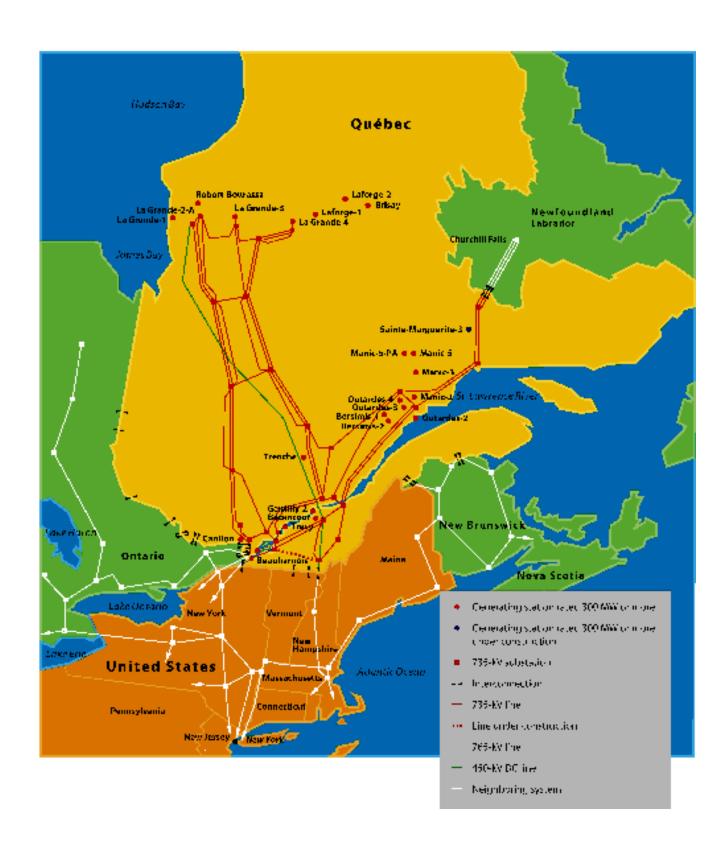
- a Executive Committee
- **Environment and Corporate Social** Responsibility
- Finance
- d **Human Resources**
- Audit е
- Pension Fund Management
- g Ethics and Corporate Governance

# generating facilities

Hydroelectric	Installed capacity (kW)	Thermal	Installed capacity (kW)	Total installed capacity at December 31, 1999** (kW)			
Robert-Bourassa	5,328,000	Nuclear		Hydroelectric g	enerating		
La Grande-4	2,650,500	Gentilly-2	675,000	stations (51)	)	29,234,895	
La Grande-3	2,304,000			Thermal genera	ating		
La Grande-2-A	1,998,000	Oil		stations (29)	•	2,269,714	
Beauharnois	1,656,860	Tracy	600,000	Total generati	ng		
Manic-5	1,528,000	•		stations (80)	_	31,504,609	
La Grande-1	1,368,000	Gas-turbine					
Manic-3	1,183,200	Bécancour	428,200				
Manic-5-PA	1,064,000	La Citière	280,000				
Manic-2	1,015,200	Cadillac	162,000				
Bersimis-1	936,000		•				
Laforge-1	837,900	Diesel					
Bersimis-2	798,000	Îles-de-la-Madeleine	67,200				
Outardes-3	756,200	Blanc-Sablon*	8,000		Commis-	Installed	
Carillon	654,500	La Tabatière*	6,800	Under	sioning	capacity	
Outardes-4	632,000	La Romaine	4,934	construction	date	(kW)	
Outardes-2	453,900	Obedjiwan	4,900			(1.1.7)	
Brisay	446,500	Kuujjuaq	3,935	Sainte-			
Laforge-2	304,000	Kuujjuarapik	3,405	Marguerite-3			
Trenche	302,400	Weymontachie	2,895	hydroelectric			
Paugan	250,100	Povungnituk	2,870	generating			
Beaumont	243,000	Port-Menier	2,790	station	2001	882,000	
La Tuque	224,000	Inukjuak	2,735				
Rapide-Blanc	201,600	Kangiqsualujjuaq	2,000				
Shawinigan-2	191,500	Salluit	2,000				
Manic-1	184,410	Kangiqsujuaq	1,520				
Shawinigan-3	171,900	L'Île-d'Entrée	1,190				
Les Cèdres	153,000	lvujivik	1,050				
Chelsea	150,700	Kangirsuk	1,050				
Grand-Mère	149,575	Umiujaq	1,050				
Rapides-des-Îles	146,520	Quaqtaq	1,045				
La Gabelle	136,580	Akulivik	850				
Première-Chute	124,200	Tasiujaq	815				
Rapides-Farmers	98,250	Aupaluk	550				
Rapides-des-Quinze	94,560	Clova	530				
Chute-des-Chats	89,300	Saint-Augustin*	400				
Bryson	61,000	Saint-Augustin	400				
Hart-Jaune	48,450						
Rivière-des-Prairies	48,300						
	48,000 48,000						
Rapide-2	•						
Rapide-7	48,000						
Chute-Hemmings Hull-2	28,800						
Lac-Robertson	27,280						
	23,760 21,600						
Sept-Chutes	21,600						
Drummondville	16,200 15,000						
Saint-Narcisse	15,000			* Kept in reserve s	ince the commiss	ioning of	
Chute-Bell	9,900			•	enerating station	_	
Mitis-1	6,400			** Hydro-Québec a	lso has access to	most of the	
Mitis-2	4,250			_	Churchill Falls po	•	
Chute-Burroughs	1,600			which has a non	ninal capacity of	5,428 MW.	

which has a nominal capacity of 5,428 MW.

# major facilities



#### call option

An option contract giving the purchaser the right, but not the obligation, to buy from the option seller an agreed amount of goods or a financial asset at a specified price on a predetermined date or at any time before the set deadline, in return for payment of the price of the option.

#### corporate governance

A set of rules governing the composition and functioning of the Board of Directors as well as relations between the Board and management.

#### decommissioning

An operation that involves shutting down a nuclear power plant at the end of its useful life. This operation is followed by a period of monitoring the decrease in radioactivity and, finally, the complete dismantlement of the facility. Decommissioning also includes the disposal of spent fuel and restoration of the site.

#### derivative instrument

Financial instrument or any other contract whose value is based on an underlying asset, index, rate of interest or exchange, etc. Derivative instruments are used to reduce exchange and interest rate risks related to long-term debt, as well as the risk of raw material price fluctuations that is inherent in some energy sales agreements. The term covers financial instruments such as forward contracts, futures, options, swaps and forward exchanges.

# electricity purchase/resale transaction

A commercial operation that involves purchasing electricity at low prices on markets outside Québec and reselling it at a higher price.

A term describing the capacity of a physical system (hydraulic, thermal, etc.) to do work. More specifically, the amount of power consumed during a given time and measured in kilowatthours (kWh).

#### energy storage agreement

An agreement by which Hydro-Québec accepts a specified amount of energy delivered to it by a third party during a given period. Hydro-Québec agrees to return the energy to that party in accordance with the terms stated in the agreement.

# environmental management system (EMS)

A component of a company's overall management system which includes the organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, setting up, carrying out, reviewing and maintaining the environment policy.

## forward exchange contract

A contract between a corporate entity and a financial institution for the exchange of currencies at a stipulated price on a specified future date.

#### green energy

Renewable energy that is in accord with the principles of sustainable development, notably with respect to the reduction of greenhouse gas emissions.

#### greenhouse gas

A gas that absorbs the energy given off by the Earth (in the form of infrared radiation) and radiates it back toward the Earth, thereby warming the surface of the planet. The principal greenhouse gases are water vapor, carbon dioxide and methane.

## ISO 14001

An international standard, adopted by ISO (International Organization for Standardization) and numerous countries, to supply organizations and corporations with the basis of an effective environmental management system. The standard specifies the requirements for such a system and provides for registration or certification by an independent registrar.

#### loop

A set of high-voltage lines and substations circling a given geographic area and allowing supply through more than one line in order to improve the security of supply and reliability of the transmission system.

# **Northeast Power Coordinating Council**

An organization set up to promote the reliability and efficiency of transmission systems in the Northeastern United States and Eastern Canada. It is also responsible for setting policies and guidelines for power system planning, operation and maintenance.

#### partial diversion

Diversion of a portion of a river's flow to make more water available from a watershed that has already been developed for hydroelectric purposes, while maintaining an environmentally acceptable controlled flow in the original river bed.

#### power

The rate at which work is done. It is generally measured in watts (W), kilowatts (kW) or megawatts (MW).

## sinking fund

A fund of cash or securities set up to periodically redeem securities in order to offset the borrowing they entail, or else to build a portfolio for the later retirement of a debt.

#### sustainable development

A planning, intervention and management concept aimed at achieving development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

#### swap

A financial operation in which two parties, for example Hydro-Québec and a bank, agree to swap interest payments (interest rate swap) or exchange rates (currency swap) as per their agreements.

#### venture capital

Capital invested in an innovative business undertaking (cutting-edge technologies, new ideas, high-risk markets). In return for greater risk, investors hope for above-average returns.

#### watt (W)

A unit used to measure power. The most common multiples are:

- kilowatt (kW) = 1,000 watts
- megawatt (MW) = 1 million watts
- gigawatt (GW) = 1 million kilowatts

### watthour (Wh)

A unit used to measure electric energy. The most common multiples are:

- kilowatthour (kWh) = 1,000 watthours
- megawatthour (MWh) = 1 millionwatthours
- gigawatthour (GWh) = 1 million kilowatthours
- terawatthour (TWh) = 1 billion kilowatthours

## Hydro-Québec

75, boul. René-Lévesque Ouest Montréal (Québec) Canada H2Z 1A4 Telephone: (514) 289-2211

**Hydro-Québec International** is a key component of Hydro-Québec's strategy. It is responsible for seeking out potential investments, professional service mandates and business opportunities related to the marketing and sale of technologies.

500, boulevard René-Lévesque Ouest 26° étage Montréal (Québec) Canada H3C 3A7 Telephone: (514) 395-4200 **Hydro-Québec CapiTech** is a corporate venture capital company that invests in companies with technology-based products and services related to the energy industry.

75, boulevard René-Lévesque Ouest 22° étage Montréal (Québec) Canada H2Z 1A4 Telephone: (514) 289-4783

The **Société d'énergie de la Baie James** chiefly provides world-class services for engineering and construction projects in the energy industry, both locally and internationally.

855, rue Sainte-Catherine Est 20° étage Montréal (Québec) Canada H2L 5B2 Telephone: (514) 840-4228 **H.Q. Energy Marketing** conducts transactions in the energy industry in Canada, including sales, purchases and exchanges at the Canada-U.S. border.

75, boulevard René-Lévesque Ouest 18° étage Montréal (Québec) Canada H2Z 1A4 Telephone: (514) 289-4304

**Noverco**, a holding company in which Hydro-Québec has a stake, controls a large number of companies involved primarily in the pipelining and distribution of natural gas.

1010, rue Sainte-Catherine Ouest 8° étage — C.P. 6162 Montréal (Québec) Canada H3C 4S7 Telephone: (514) 392-5652



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We would like to thank all the employees who appear in this Annual Report.

# Units of Measure

\$M: millions of dollars
MW: megawatt (one million watts)
GW: gigawatt (one million kilowatts)
GWh: gigawatthour (one million
kilowatthours)
TWh: terawatthours (one billion
kilowatthours)

The following publications may be obtained at our Web site (www.hydroquebec.com) or by calling 1 800 363-7443

Strategic Plan 2000-2004 Annual Report 1999 (this document) Environmental Performance Report 1999 Financial Profile 1999

# www.hydroquebec.com

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