CANADA

National Energy Board

Reasons for Decision

Hydro-Québec

EH-1-85

November 1985

For Exports to Citizens Utilities Company

National Energy Board

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In the Matter of

Hydro-Québec

For Exports to Citizens Utilities Company

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Abbreviations

Units of measurement

kV	kilovolt	(1 000 volt)
MW	megawatt	(1 000 kilowatts)
kW.h	kilowatt hour	
GW.h	gigawatt hour	(1 000 000 kW.h)
TW.h	terawatt hour	(1 000 GW.h)
$	Canadian current dollar (unless otherwise indicated)	

Names

Act	*National Energy Board Act*
Applicant	Hydro-Québec
Board	National Energy Board
CFLCo	Churchill Falls (Labrador) Corporation Limited
Citizens Utilities	Citizens Utilities Company
Contract	Power and Energy Contract
NB Power	New Brunswick Electric Power Commission
NEB	National Energy Board
US	United States of America
Vermont	State of Vermont

Recital and Appearances

IN THE MATTER OF the *National Energy Board Act* and the Regulations made thereunder; and

IN THE MATTER OF an application by Hydro-Québec for licences to export electric power and energy to Citizens Utilities Company, pursuant to Part VI of the said Act, filed with the Board under file number 1923-4/Q2-12.

HEARD in Montréal, Québec on 24 and 25 September 1985

BEFORE:

J. Farmer	Presiding Member
A.D. Hunt	Member
J.L. Trudel	Member

APPEARANCES:

P.R. Fortin	Hydro-Québec
I.A. Blue, Q.C.	The New Brunswick Electric Power Commission
D. Goulding	Ontario Hydro
D. Tremblay	National Energy Board

Executive Summary

Note:
This summary is provided solely for the convenience of the reader and does not constitute part of these decisions or the reasons for them.

The Application

Hydro-Québec's application to the National Energy Board (the Board) for two licences dated 4 July 1985 was revised at the hearing to request one licence to export both firm power and energy and assured secondary energy to Citizens Utilities Company (Citizens Utilities), an American electric utility located in the northern part of the State of Vermont adjacent to the international boundary. This licence request was for maximum quantities of 100 MW of power and 657 GW.h per year of energy throughout the period from 1 November 1985 to 31 December 1990. Firm power and energy exports would take place from 15 March to 15 December of each year while assured secondary energy exports would take place at any time. The exports would be in accordance with a contract dated 5 August 1985 between Hydro-Québec and Citizens Utilities.

A hearing on this application took place in Montreal, Quebec in September, 1985.

The Board's Finding

ln its Decision the Board found that the power and energy to be exported would be surplus to reasonably foreseeable Canadian requirements. The Board decided that it would be more appropriate to issue three licences, one for each category of power and energy to be exported. To ensure that the prices to be charged would be just and reasonable in relation to the public interest, the Board would condition the licences it proposes to issue to require that the different types of power and energy proposed for export be re-offered separately, as a one-time offer, to directly interconnected Canadian utilities before any exports occur.

The Board also stated in its Decision that it required that Hydro-Québec provide information to the Board each year during the period of each licence that would allow the Board to monitor whether the export prices would continue to be not less than the prices for equivalent service to Canadian customers.

The Board is prepared to issue one licence to cover the firm power and energy exports from 15 March 1986 to 30 November 1990 and two licences to cover the assured secondary energy exports for use within and beyond Citizens Utilities' service area from the later of 1 January 1986 or the day the licences are approved by Governor in Council to 31 December 1990.

Chapter 1
Background

The Applicant, Hydro-Québec, is a public utility producing and distributing electricity throughout Québec. It was established in 1944 by an act of the legislature of the Province of Québec. It operates under the authority of the Hydro-Québec Act (R.S.Q. c.H-5).

Hydro-Québec owns and operates an electric power system which covers nearly all regions of Québec. Appendix l is a map illustrating the main facilities in the system as of 1984. The map also shows the interconnections with systems outside the Province. Appendix ll is a summary of Hydro-Québec's main generating stations. At the end of 1984, the Applicant had 23 479 MW of generating capacity and a total supply capacity, including firm power purchases, of 28 705 MW.

The interconnections between Hydro-Québec and neighbouring electric systems in Canada include, among others, 735 kV lines to the Churchill FaIls generating station in Labrador. There are 14 transmission lines between Ontario and Québec having a combined transmission capacity of approximately 1500 MW. These ties are used to connect electrically isolated areas or generating plants in one province to the electric system in the other province. Between Québec and New Brunswick there are two direct current ties each with a maximum capacity of 350 MW. Alternating current transmission lines associated with these ties can supply radially an addition 300 MW of New Brunswick's load, giving a total transmission capacity between the two provinces of 1000 MW.

The major interconnections with neighbouring American states include a 120 kV double-circuit line having a capacity of 186 MW owned by the Cedars Rapids Transmission Company Limited and a 765 kV line to New York State having a capacity of 2500 MW. The Board has approved the construction of a ±450 kV direct current interconnection, having an initial transfer capacity of 690 MW, with the New England States scheduled to be in service in 1986.[1]

The interconnections with the State of Vermont include two 120 kV lines; one with a transfer capacity of 100 MW between the Stanstead substation in Québec and the Border substation in Vermont, the other with a transfer capacity of 200 MW between the Bedford substation in Québec and the Highgate substation in Vermont. There are also three 25 kV lines having a combined transfer capacity of 15 MW.

There is also a number of small international power lines originating in Québec which are primarily low voltage distribution circuits serving small loads across the border.

Total transfer capacity of Hydro-Québec's existing lines to the United States is approximately 3000 MW.

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[1] Reasons for Decision - Hydro-Québec / NEPOOL, NEB August 1984.

Chapter 2
Licences Held by Hydro-Québec

2.1 State of Vermont

Hydro-Québec holds two licences authorizing it to export a maximum of 525 GW.h annually to Citizens Utilities using the Stanstead-Border 120 kV line and the three 25 kV lines. Licence EL-132 covers exports of firm power and energy from April to October each year and expires in December 1985. Licence EL-133 covers exports of interruptible energy. This licence was to expire in September 1985 but has been extended to 31 December 1985.

The Applicant has two other licences, EL-168 and EL-169, for exports to Vermont Department of Public Service over the two 120 kV lines. Licence EL-168 authorizes exports of firm power and energy of up to 150 MW and 1314 GW.h annually. Licence EL-169 provides for interruptible exports of power and energy, up to a maximum of 200 MW of power and 1752 GW.h of energy during any consecutive 12-month period less any amount of power and energy exported pursuant to licence EL-168. Both licences expire on 29 February 1996 at the latest.

2.2 New York and New England Areas

Hydro-Québec holds ten licences authorizing exports to the New York and New England utilities.

Five licences authorize general interruptible exports or are related to specific power and energy contracts with the Power Authority of the State of New York.

Two licences allow export of short-term firm power and energy to utilities located in the New York and New England areas. These exports can be made over any international power line between Québec and these areas.

Three other licences authorize exports to the New England Power Pool (NEPOOL). These include an energy banking licence, a general interruptible licence and one related to a specific energy contract with NEPOOL.

Chapter 3
The Application

3.1 Exports to be Authorized

Hydro-Québec's application dated 4 July 1985 was revised at the hearing to request one licence authorizing the following exports:

(a) firm power and energy to Citizens Utilities for a period of four years and nine months, from 15 March 1986 to 15 December 1990 (between 15 March and 15 December of each year of the requested period), according to the terms of the Power and Energy Contract between Hydro-Québec and Citizens Utilities; and

(b) assured secondary energy to Citizens Utilities for a period of five years and two months from 1 November 1985 to 31 December 1990, according to the terms of the Power and Energy Contract between Hydro-Québec and Citizens Utilities.

The application had originally requested two licences, one for the export of firm power and energy and the other for the export of assured secondary energy described as interruptible energy. According to Hydro-Québec the application had requested two licences because Hydro-Québec had assumed the Board preferred authorizing the exports under separate licences.

3.2 Licence Limits

The application covers the export of a maximum quantity of power not exceeding 100 MW and a maximum quantity of energy not exceeding 657 GW.h per year.

The following table gives the requested limits for each year of the requested period for the export of firm power and energy (part (a) of the application).

Table 3-1
REQUESTED LIMITS

Year	Firm Power (MW)	Firm Energy (GW.h)
1986	48	205.0
1987	50	213.5
1988	52	222.1
1989	54	230.6
1990	56	239.2

The requested limits for assured secondary energy exports (part (b) of the application) are as follows:

i) up to 100 MW of power less the firm power exported pursuant to part (a) of the application, and

ii) an annual amount of assured secondary energy of up to 657 GW.h less the annual amount of energy exported pursuant to part (a) of the application.

Chapter 4
The Contract

The Power and Energy Contract (the Contract) between Hydro-Québec and Citizens Utilities was signed on 5 August 1985. This contract describes the conditions covering the sale of firm power and energy and assured secondary energy.

The Contract, effective on 1 November 1985, will terminate on 31 December 1990.

4.1 Conditions

Hydro-Québec shall make available to Citizens Utilities the amounts of firm power and energy during 24 hours each and every day from 15 March through 1 5 December of each year listed in the following table.

Table 4-1
MAXIMUM AMOUNT

Year	Power (MW)	Energy (GW.h)
1986	48	205.0
1987	50	213.5
1988	52	222.1
1989	54	230.6
1990	56	239.2

Citizens Utilities agrees to pay for the amounts of firm electrical power and energy listed in the following table and made available by Hydro-Québec during the period 15 March through 15 December of each year whether these amounts are taken or not.

Table 4-2
MINIMUM (TAKE OR PAY) AMOUNT

Year	Power (MW)	Energy (GW.h)
1986	20	65.7
1987	21	69.0
1988	22	72.3
1989	23	75.5
1990	24	79.8

In addition to the firm power and energy, Hydro-Québec may sell assured secondary energy to Citizens Utilities. However, the total power sold must not exceed 100 MW and the total energy must not exceed 657 GW.h during any calendar year of the term of the Contract, unless otherwise agreed by the Operating Committee.

4.2 Price

The price of firm power is $600 US/MW/week based on the maximum amount of such electrical power reserved by Citizens Utilities in each week.

The price of firm energy is as follows:

Table 4-3
FIRM ENERGY PRICE

Year	Price $ US/MW.h
1986	28.5
1987	28.5
1988	30.5
1989	32.5
1990	34.5

The price of assured secondary energy is as follows:

Table 4-4
SECONDARY ENERGY PRICE

Period	Price $ US/MW.h
1 Nov. 1985 to 31 Dec. 1986	33.0
1 Jan. 1987 to 31 Dec. 1987	33.5
1 Jan. 1988 to 31 Dec. 1988	35.0
1 Jan. 1989 to 31 Dec. 1990	38.0
1 Jan. 1990 to 31 Dec. 1990	40.5

4.2.1 Rebate

A rebate of $4 US/MW.h applies to sales of assured secondary energy delivered to loads beyond Citizen Utilities service area in consideration for the necessary upgrading by Citizens Utilities of its transmission facilities to 115 kV to supply up to 40 MW of such load.

4.3 Dependability of Supply

All the power and energy provided for under the Contract shall be derived from hydraulic resources. Hydro-Québec shall not be obliged to run thermal generation or to purchase electrical power and energy from a third party nor to operate its system in an insecure manner in order to fulfil its commitment under the Contract.

ln addition to the above, Hydro-Québec can reduce or interrupt its deliveries of assured secondary energy to Citizens Utilities.

(a) to supply the primary and interruptible loads on Hydro-Québec's system and to supply its firm commitments to neighbouring systems;

(b) to maintain adequate spinning reserve and transmission security;

(c) to continue to supply secondary energy loads within Hydro-Québec's system, provided such loads were committed or connected to the system and taking deliveries of power at the time the schedule was agreed upon; and

(d) in case it becomes necessary to use fossil-fired generation to supply the primary and interruptible loads in Hydro-Québec's system.

Chapter 5
The Evidence

5.1 Québec Loads

At the end of 1984, the Applicant served 2 327 040 domestic and farm customers, 229 895 commercial customers and 12 828 industrial customers. The industrial category includes such primary industries as mining and pulp and paper as well as a large body of secondary industries in the manufacturing sector.

Hydro-Québec's peak domestic load in December 1984 was 21 760 MW, compared to a peak of 19 788 MW the year before, for an increase of 10%. Total domestic energy sales in 1984 were 123.8 TW.h, an increase of 15% from the previous year.

5.2 Generating Capacity and Additions

The total generating capacity of the Hydro-Québec system in 1984 was 23 479 MW including 21 731 MW of hydraulic capacity, 1063 MW of thermal capacity and 685 MW of nuclear capacity (see Appendix ll). Hydro-Québec also had access to most of the output of the Churchill Falls power station which has a nominal capacity of 5 225 MW.

To supply the forecast increase in Québec demand, the Applicant is completing the construction of large hydraulic facilities on the La Grande River. The LG-4 Station is planned to be completed in 1985, with a total capacity of 2 650 MW.

5.3 Load, Supply and Excess Power and Energy

The application includes estimates of monthly power requirements and generating capacity for the Hydro-Québec system throughout the period covered by the requested licence.

A Hydro-Québec witness stated that the estimates of electricity demand during the proposed export period are the same as those described in a document entitled "Hydro-Québec Development Plan 1985-1987 - Horizon 1994" which was filed as an exhibit during the hearing. According to this document, Hydro-Québec forecasts an average growth rate of 3.4% for the period 1983-2001.

Appendix III shows, for the months of March and December of each year of the requested export period, the Applicant's estimates of generating capacity, regular (peak) loads including firm commitments outside the province, and excess power. March and December are the months of the lowest excess of power during the nine-month period, 15 March to 15 December, in which the proposed firm export would occur each year[1]. The Appendix shows that, when required reserves are taken into account, Hydro-Québec would still have substantial quantities of excess power during the critical months of every year of the proposed export except for December in 1987 and 1990. ln these months, Hydro-Québec would not have the full amount of reserve required by its own system criteria;

[1] In response to a question from Board Counsel, a witness indicated that it was very unlikely that the December peak load would occur before 15 December.

consequently, there is an increased probability that Hydro-Québec might need to call on emergency aid at these times to maintain service to its regular customers.

The generating capacity shown in Appendix III includes both Hydro-Québec's own generation and purchases. A witness for the Applicant explained that Hydro-Québec had included another 173 MW of capacity from Churchill Falls in addition to the contractual amount of 4 083 MW included in previous applications. The witness stated that this additional amount was the portion of the 300 MW of recall power which Hydro-Québec considered would not be taken by Churchill Falls (Labrador) Corporation Limited (CFLCo)[1]. According to the witness, Hydro-Québec had already been approached by CFLCo to take back 40 MW of recall power previously taken by CFLCo for use in Labrador. He added that Hydro-Québec assumed, based on this fact and on its evaluation of the future load requirements in Labrador, that no additional portion of this recall power would be required by CFLCo before 1991.

Appendix III includes, as emergency aid, two components which could increase the surplus capacity at the peak time, namely: interruptible load shedding and aid from neighbouring systems. Under cross-examination by the Board, the Applicant's witness explained that in high-load situations, such as at the time of the winter peak, Hydro-Québec can shed certain industrial loads which could be interrupted provided that a few hours notice is given. The witness also stated that Hydro-Québec has taken account of possible purchases from neighbouring systems up to an estimated 500 MW throughout the period of the proposed licences. He explained that this is a potential figure which Hydro-Québec believes would be available from neighbouring Canadian or American systems in emergency situations.

The witness for Hydro-Québec explained that, although both thermal and nuclear capacity had been included in the data used to prepare Appendix III, thermal generation would not normally be used on its system when exports took place[2]. On the other hand, the nuclear station, Gentilly 2, had to be operated as base-load capacity.

Appendix IV gives estimates of annual energy capability, regular load and excess energy. It shows that Hydro-Québec will have large quantities of excess energy each year throughout the duration of the Contract. These estimates are based on average water flow, normal operating conditions and interseasonal and multi-year regulation of reservoirs. It was explained that due to the nature of the system. which has the capacity to store large quantities of water for many years, the energy capabilities are based on average flow conditions[3], rather than on dependable flow conditions[4].

---

1 Under its contract with Hydro-Québec, CFLCo has the right to recall up to 300 MW of power from the Churchill Falls station output.

2 If the output of a thermal station were required during the day to serve domestic load but exports took place during the night, for operational reasons some minimum level of output would have to be maintained to keep the station on-line during the night, in order that its output could be available for the following day.

3 Annual energy availability exceeded 50% of the time.

4 Annual energy availability exceeded 85% of the time.

In addition to the quantities of excess power and energy shown in Appendix IV, quantities of power and energy in excess of Hydro-Québec's minimum contractual purchases would be available from the Churchill Falls generating station. Since 1978, Hydro- Québec has purchased, in addition to the quantities given in its application, more than 5 000 GW.h per year from this station.

5.4 Export Market

The export market is located in the northern part of the State of Vermont adjacent to the international boundary and is served by Citizens Utilities Company, a Delaware Corporation. Exports have been made from Québec to this region continuously since 1912. Some of the exports may also serve electrical systems of other Vermont utilities located in the proximity of Citizens Utilities' system.

The economic activity in this area is mainly agricultural with a small manufacturing industry and a developing tourist industry. Citizens Utilities owns only small generating facilities in Vermont and has no plans for expansion. The bulk of its load is supplied by energy purchased from Hydro-Québec and American utilities.

The annual peak load is projected to increase from 71.6 MW in 1986 to 87.2 MW in 1990 and the annual energy demand from 359.8 GW.h in 1986 to 438 GW.h in 1990. This is equivalent to an average annual growth rate of 5 % in each case. The table below indicates that Citizens Utilities is counting on substantial imports from Hydro-Québec to meet its power and energy requirements during this period.

Table 5-1
CITIZENS UTILITIES COMPANY
Projected Power and Energy Requirements by Sources
(Percent)

	1985/86		1989/90	
Sources	**Power***	**Energy****	**Power***	**Energy****
Instate Generation	32	16	26	13
Purchases:				
Hydro-Québec	49	62	62	70
Others	19	22	12	17
Total	100	100	100	100

* Peak during 9 month period form 15 March to 15 December.
** Total during annual period from 15 December to 15 December.

The evidence does show, however, that Citizens Utilities is not relying on Hydro-Québec to meet its peak loads during the periods from 15 December through 15 March as the necessary power would be available from Citizens Utilities' own generation or from purchases from utilities other than Hydro-Québec.

5.5 Offers to Canadian Utilities

On 27 June 1985, the Applicant sent identical letters of offer to The New Brunswick Electric Power Commission (NB Power), St. Lawrence Power Company.

Ontario Hydro and Churchill Falls (Labrador) Corporation Limited. These letters, which were followed later by copies of the application, requested these companies to make their position known regarding the proposed exports by 9 August 1985.

The proposed exports of firm power and energy and assured secondary energy were offered as a "package deal". The offers were presented in this manner so that they would reflect the understanding between Hydro-Québec and Citizens Utilities of their contractual obligations with respect to the proposed exports. The price included in the offer was the export price, except that the $4 US/MW.h rebate applying to exports of assured secondary energy to utilities beyond Citizens Utilities' service area, was not included.

None of the utilities that responded to the offer indicated that they were interested in it. However, St. Lawrence Power Company stated it might be interested in some portion of the energy in future years. CFLCo did not respond to the offer.

5.6 Interruption of Deliveries of Assured Secondary Energy

Hydro-Québec's written evidence indicated that it was not seeking the conventional type of interruptible licence which contains a condition permitting Canadian utilities to pre-empt all or part of the proposed exports at any time to meet their firm requirements in Canada. A witness explained that while such a condition had been acceptable to Hydro-Québec in the case of the existing licence, it is no longer acceptable. ln the present case, unlike the earlier case, the export prices are specified in the contract, thus giving Canadian utilities the opportunity to fully evaluate the proposed exports when the offer is made. Therefore, according to Hydro-Québec, Canadian utilities should not be given any additional rights to pre-empt the assured secondary energy once they had indicated they were not interested in the original offer.

5.7 Prices

Prices for firm power and energy and assured secondary energy are as set out in Section 4.2 of this report.

5.7.1 Canadian Costs

According to the application, the proposed exports would require neither new generation nor transmission facilities. The only costs would be the incremental generating costs associated with the proposed exports. These costs, estimated to be less than $1/MW.h, apply to both the firm and assured secondary energy exports.

5.7.2 Costs for Equivalent Service to Canadians

ln its response to an information request of the Board, Hydro-Québec stated that the export price would not be less than the price to Canadians for equivalent service in related areas. Part of its response is translated and restated below:

> "Hydro-Québec has offered the power and energy proposed for export to the New Brunswick Electric Power Commission, Ontario Hydro, St. Lawrence Power Company and Churchill Falls (Labrador) Corporation Limited at essentially the same price and conditions as agreed upon with Citizens Utilities Company. These Canadian utilities, with the exception of Churchill Falls which has not responded, have indicated that they were not interested in this offer.
>
> It is then possible to presume that the three Canadian utilities that responded to this offer have concluded that the price of the firm power and energy as provided for under the contract with Citizens Utilities Company would be greater than their own production costs or costs of other purchases that they could arrange with Hydro-Québec during the period of this contract."

Hydro-Québec also stated that, based on its estimates, the production costs of both Ontario Hydro and NB Power would normally be less than the export price. A witness for Hydro-Québec indicated, however, that depending on the future price of oil, it might be possible for the export price to be less than the price for sales of fuel replacement energy to New Brunswick.

5.7.2.1 Rebate

The offers described above did not contain the $4 US/MW.h rebate intended to apply to exports of assured secondary energy for use by utilities beyond Citizens Utilities' service area. According to Hydro-Québec, this rebate is intended to reimburse Citizens Utilities for a portion of the cost of upgrading its transmission facilities required to transmit Hydro-Québec energy to loads beyond Citizens Utilities' service area Hydro-Québec claimed that this rebate would be an acceptable price to pay for the additional revenue to be obtained by the opening up of a new market for its surplus energy.

According to Hydro-Québec, there was no justification for including the rebate in the offer to neighbouring Canadian utilities since its studies had shown that there was no possibility of increasing the market for sales of its surplus energy to these utilities. Hydro-Québec did state that it was ready to negotiate a rebate with directly interconnected Canadian utilities in similar circumstances, that is, when such a financial contribution was necessary for the construction of new facilities which would present Hydro-Québec with a new Canadian market and thereby increase its revenues.

5.7.3 Alternative Costs in the United States Market Area

To show that the proposed export prices would not be materially less than those of other sources in the export market, the application put forward a number of alternative sources of electricity available to Citizens Utilities. These included purchases from the Vermont Yankee nuclear station, from NEPOOL, from a number of other smaller United States sources including the Vermont Department of Public Service and from Ontario Hydro. The composite cost of power and energy from the Vermont Yankee nuclear station, which was described by a witness for Citizens Utilities as its most likely alternative

source, was estimated to be approximately $40 US/MW.h throughout the export period. Although Ontario Hydro was mentioned as an alternative source, the witness indicated that there could be difficulties in wheeling significant amounts of electricity from the Ontario Hydro system.

The witness for Citizens Utilities indicated that for the last 60 years electricity from the province of Québec had been relied upon by Citizens Utilities to supply a significant portion of its firm requirements and Citizens Utilities had not actually ever negotiated major contracts for electricity from other sources, such as the Vermont Yankee nuclear station. In the event that electricity from Hydro-Québec were no longer available the witness confirmed that his company's most likely recourse would be to negotiate a series of short-term purchases from the lowest cost sources available at the time.

5.8 Environmental Effects

The application states that Hydro-Québec would not make any additions to its existing facilities to produce these exports. Moreover, the Applicant would not operate its thermal stations to produce power for export. As for the Gentilly 2 nuclear station, the application states that this plant will operate essentially as a base-load unit and its operation would not be affected by the exports.

Chapter 6
Interventions

Interventions were submitted by NB Power and Ontario Hydro. Short summaries of each of these are given below.

6.1 The New Brunswick Electric Power Commission

In its intervention NB Power stated that it supported Hydro-Québec's application. ln the event the Board intended to issue an interruptible licence for the export of assured secondary energy by Hydro-Québec, according to NB Power such a licence should include a "first offer" condition, i.e. a condition allowing Canadians to pre-empt the export. NB Power considered that in this case Hydro-Québec should be required to offer the proposed export weekly when the schedule for the following week is drawn up. NB Power argued that the Board could find that the assured secondary energy was interruptible according to Section 2(1) of the National Energy Board Part VI Regulations and that the Board had the jurisdiction to make licence conditions which overrode contractual provisions. Such a first offer condition would ensure that the interests of Canadian utilities such as NB Power would be safeguarded and would present no risk to Citizens Utilities because of Hydro-Québec's large surplus of energy. Finally the Board's past practice required that interruptible licences include such first offer conditions.

NB Power stated that, in fact, the Board did not need to issue an interruptible licence for the export of assured secondary energy. NB Power concurred with Hydro-Québec that one licence covering the export of both firm power and energy and assured secondary energy should be issued. It argued that the Power and Energy Contract was a "package deal" and therefore should be covered by a single licence; and, in this case, a single licence was in the public interest since the proposed exports were covered by a single contract and the exports constituted only a small portion of Hydro-Québec's total system output.

NB Power stated that the evidence put forward by Hydro-Québec on the prices included in the offers to Canadian utilities and the production costs of these utilities for power and energy was sufficient to satisfy the Board's second price guideline, i.e., to demonstrate that the export price would not be less than the price to Canadians for equivalent service in related areas. NP Power added that, based on the Board's past practice, it should find that the evidence put forward by Hydro-Québec on the offers and responses complied with Board's second price guideline.

6.2 Ontario Hydro

In its intervention Ontario Hydro stated that it supported Hydro-Québec's application. If the Board determined that the assured secondary energy was interruptible, according to Ontario Hydro, a licence condition giving certain interception rights to Canadian electrical utilities could be appropriate. Ontario Hydro also stated that if the offer made to it by Hydro-Québec had included the $4 US/MW.h rebate, the offer still would not have been attractive to Ontario Hydro.

Chapter 7
Disposition

The Board has given careful consideration to all the evidence and submissions presented and has reached the following conclusions.

7.1 Surplus

7.1.1 Available Excess Power

The Board accepts Hydro-Québec's evidence regarding the use of the additional 173 MW of power available from Churchill Falls and the use by Hydro-Québec of its interruptible loads and aid from neighbouring systems in its surplus power calculations. The Board notes that there will be excess power in all months of the proposed licence period except in the month of December of 1987 and 1990. In these months Hydro-Québec's forecast reserves are expected to be less than the level required to maintain its own system reliability criteria as shown in Appendix III. Consequently, in these months, there is a higher probability that Hydro-Québec would have to call on emergency aid to maintain its firm load commitments.

7.1.2 Available Excess Energy

The Board notes that Hydro-Québec will have large quantities of excess energy in each year of the proposed export period. The Board also notes that the excess energy figures submitted by Hydro-Québec, which are shown in Appendix IV, are those levels resulting from its generation expansion plan under average hydraulic conditions, normal system operations and a 3.4% average annual rate of load growth.

7.1.3 Exports of Firm Power

Hydro-Québec has requested a licence authorizing the export of firm power and energy under the Contract with Citizens Utilities from 15 March to 15 December of each year over a period of four years and nine months commencing in 1986. The maximum annual quantities of exports requested are shown in Section 3.2 and range from 48 to 56 MW of firm power at up to 70% capacity factor. Appendix III shows that after meeting domestic load plus all other firm commitments Hydro-Québec has sufficient excess power in all months to provide for an adequate safety margin and to make the proposed export except for the month of December 1990.

The Board is satisfied that, except for December 1990, the proposed export of power to Citizens Utilities would be surplus to reasonably foreseeable Canadian needs. ln that month the total excess power including emergency aid is only 227 MW or less than 1 % of the regular loads. The Board does not consider this an adequate safety margin after accounting for the proposed exports as well as the possible increase in sales to other Canadian utilities which might result from licence conditions outlined later in this report. For this reason the Board would not be prepared to authorize the export of firm power and energy beyond 30 November 1990.

7.1.4 Exports of Firm and Assured Secondary Energy

In addition to firm energy exports, the licence requested by Hydro-Québec would also authorize exports of assured secondary energy under the Contract with Citizens Utilities for a period of five years and two months, commencing on 1 November 1985. The annual maximum combined quantity of firm and assured secondary energy requested for export is 657 GW.h.

Appendix IV shows that in all years of the proposed export the maximum combined quantity of firm and assured secondary energy proposed for export amounts to less than 3% of the forecast excess energy.

The Board is satisfied that the proposed export of firm and assured secondary energy to Citizens Utilities would be surplus to reasonably foreseeable Canadian needs.

7.1.5 Number of Licences

The Applicant originally requested two export licences, one for firm power and energy and the other for interruptible energy. At the hearing this request was changed to one licence, covering both firm power and energy and assured secondary energy.

The Board has considered these requests and decided that it would be more suitable to issue three licences, one for firm power and energy, one for assured secondary energy used by Citizens Utilities and the third for assured secondary energy for use by utilities beyond Citizens Utilities' service area.

7.2 Export Price

In assessing the suitability of an export price, the Board has developed three guidelines: it should recover the applicable costs incurred in Canada, it should not be less than the price for equivalent service to Canadian customers in related areas, and it should not be materially less than the least cost alternative in the proposed market area.

7.2.1 Applicable Costs in Canada

The Board considers that the applicable costs for both the firm power and energy and assured secondary energy exports include only the incremental costs of generation since the evidence shows that all facilities to be used to make the proposed exports have been or are being built primarily to supply the Québec load. The evidence shows that these costs would be significantly less than the expected revenues throughout the requested licence period.

The Board is satisfied the export prices would recover all the applicable costs which might be incurred in Canada.

7.2.2 Price for Equivalent Service to Canadians

The evidence shows that Hydro-Québec offered the proposed exports of firm power and energy and assured secondary energy to all directly interconnected Canadian utilities, none of whom showed any interest in accepting the offer. The Board notes, however that Hydro-Québec did not include, in the offer to Canadian utilities, a category corresponding to the sale of assured secondary energy to utilities beyond Citizens Utilities' service area, to which a $4 US/MW.h rebate would apply.

Although the offers to Canadian utilities were intended to demonstrate compliance with the Board's second price guideline, the Board considers that the offers and the corresponding refusals do not constitute full and complete evidence that the second price guideline has been satisfied. The Board does, however, attach some weight to them and to the testimony of Hydro-Québec's chief witness regarding the alternative costs for power and energy of the responding utilities.

The Board has two major concerns regarding the offers; the first concerns the fact that the different categories of power and energy exports were offered to Canadians as a package deal and the second concerns the fact that the export price, after allowance for the rebate, was not made available to Canadian utilities.

The Board is not prepared to accept the argument that the proposed exports are a package deal and therefore, inseparable. The Applicant conceded that the existing firm and interruptible exports to Citizens Utilities were not treated as a package in previous hearings. The reason given for different treatment in this case is that the export prices are now specified in the Contract while previously they were not. The Board considers that this is not sufficient reason for treating the exports as a package. ln the opinion of the Board, it is the service being provided and the contractual arrangements associated with these services which dictate whether or not they are separable. The service being provided, in the case of the firm power and energy, is different than in the case of the assured secondary energy[1]. Moreover, there are no specific contractual provisions stipulating that the purchase of assured secondary energy is conditional on the acceptance by the purchaser of the firm power and energy. Thus, the Board would require, as a condition of any licence it might issue, that Hydro-Québec re-offer the firm power and energy and the assured secondary energy to directly interconnected Canadian utilities on a separate basis before any export occurs. The Board would also require that Hydro-Québec not export energy that would be needed to supply any Canadian utility that accepted the re-offer of assured secondary energy.

Turning now to the matter of assured secondary energy exports for use by utilities beyond Citizens Utilities' service area, for which the Applicant granted a $4 US/MW.h rebate, the Board does not accept Hydro-Québec's justification for not including the export price resulting from the rebate, in the offer to Canadian utilities.

The Board accepts the need for such a rebate to reimburse Citizens Utilities for part of the cost of upgrading its facilities as required to transmit this energy to the ultimate consumers beyond its service area. The Board acknowledges Hydro-Québec's argument that the rebate is an expense to pay for opening up a new market which would not otherwise be available to it. However, the Board also considers the rebate to be a mechanism for reducing the border price to a value that will make the price of the energy proposed to be exported competitive for utilities beyond Citizens Utilities' service area. The Board sees no reason why interconnected Canadian utilities should not be able to purchase, if they so desire, the same quantity of energy at the same border price as the proposed export.

For this reason, the Board would require, as a condition of any licence it might issue, that Hydro-Québec offer to directly interconnected Canadian utilities, as a one-time offer that could be accepted in

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[1] For example, deliveries of assured secondary energy can be reduced or interrupted by Hydro-Québec under more circumstances than deliveries of firm power and energy.

whole or in part, an amount of assured secondary energy up to the maximum amount which might be exported for use by utilities beyond Citizens Utilities' service area.

The price at which this energy would be offered is the net price which results from the application of the $4 US/MW.h rebate to the price of assured secondary energy for use beyond Citizens Utilities' service area as described in Article 7.2 of the Contract, adjusted for any difference in the cost on Hydro-Québec's system of delivering the energy to the Canadian customer instead of to the export customer.

A more detailed description of the required basis for re-offering the power and energy is given in Section 7.3.

Based on the evidence and provided that re-offer conditions as described above are included in any licence it might issue, the Board would be satisfied that, at this time, the prices for the proposed exports are not less than the prices for equivalent service to Canadian customers.

The Board has not been convinced that there is sufficient evidence to show that the export price will continue to be not less than the price for equivalent service to Canadian customers throughout the duration of the proposed exports. Although further evidence to this effect is desirable, the Board accepts that it is unlikely there will be a price reversal within the export period and is not prepared in this case to deny the proposed exports. ln order to monitor the relationship between the export prices and the prices for equivalent service to Canadian customers, the Board requires that Hydro-Québec inform the Board once a year during the period of each licence, of Hydro-Québec's average prices for sales of power and energy to Canadian utilities during the previous year that could be considered as equivalent to the proposed exports[1].

To assist Hydro-Québec in determining if particular sales to neighbouring Canadian utilities could be considered as equivalent to the proposed exports, the Board offers the following guidelines:

a) the conditions, if any, under which deliveries may be interrupted under a contract with a Canadian utility should be essentially the same as those provided for under the export contract;

b) reasonably wide differences between the sale quantities of power and/or energy provided for under a contract with a Canadian utility and the corresponding export quantities provided for under the export contract should not be considered as affecting the equivalence of the two types of transactions; and

c) reasonably wide differences between the length of a contract with a Canadian utility and the corresponding export contract length and reasonably wide seasonal variations in the annual delivery periods of these contracts should not be considered as affecting the equivalence of the two types of transactions.

7.2.3 Purchaser's Least Cost Alternative

In the application and during testimony Citizens Utilities gave a number of alternatives to its purchase of power and energy from Hydro-Québec. However, replies given by the witness for Citizens Utilities

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[1] The price of the power shall be given in $/MW per week and the price of the energy shall be given in $/MW.h.

to questions from Board Counsel showed that there appeared to be no single realistic alternative to the proposed export. If power and energy from Hydro-Québec were not available, the only feasible course open to Citizens Utilities would be a series of short-term purchases from the lowest cost source available at the time.

The Board accepts this evidence and concludes that there is no realistic single alternative which would provide Citizens Utilities with the same amount of power and energy for the same period. Because there is no comparable alternative, the Board considers that the third price guideline cannot be applied in this case.

As related considerations, the Board notes that the export price is consistent with the prices given in the application for Citizens Utilities' theoretical alternatives. Also, the take-or-pay provision in the Contract for the firm power and energy would provide a significant guaranteed income for Hydro-Québec even if Citizen Utilities did not take any additional firm power or firm and assured secondary energy.

The Board believes that these considerations provide adequate reasons for accepting the export price.

7.3 Re-Offer to Canadian Utilities

The Board requires that the re-offers to directly interconnected Canadian utilities be arranged as indicated below.

7.3.1 Re-Offer of Firm Power and Energy

The re-offer shall be for the maximum annual amounts of power and energy specified in Article 1.1 of the Contract and shall include the requirement to take or pay for the minimum amounts specified in Article 1.2 of the Contract. These maximum and minimum amounts are shown in the following table.

Table 7-1
MAXIMUM AND MINIMUM ANNUAL AMOUNTS OF POWER AND ENERGY

	MAXIMUM AMOUNT		MINIMUM AMOUNT	
Year	**Power (MW)**	**Energy (GW.h)**	**Power (MW)**	**Energy (GW.h)**
1986	48	205.0	20	65.7
1987	50	213.5	21	69.0
1988	52	222.1	22	72.3
1989	54	230.6	23	75.5
1990	56	239.2	24	79.8

The prices shall be in accordance with Articles 7.1.1 and 7.1.2 of the Contract.

7.3.2 Re-Offer of Assured Secondary Energy for use in Citizens Utilities' service area

The re-offer shall be for quantities of power and energy specified in Article 1.3 of the Contract, i.e., the total power associated with all assured secondary energy sales to a Canadian utility shall not exceed 100 MW less any firm power sales to that utility and the maximum annual assured secondary energy sales shall not exceed 657 GW.h less the annual amount of any firm energy sales[1] to that utility. The price shall be in accordance with the table in Article 7.2 of the Contract for the energy for use in Citizens Utilities' system.

7.3.3 Re-Offer of Assured Secondary Energy for use beyond Citizens Utilities' service area

The re-offer shall be for a quantity of energy up to 263 GW.h in any calendar year. This is based on a maximum rate of 40 MW as specified in Article 1.5 of the Contract and a load factor of 75% which is in accordance with the overall limits of assured secondary energy specified in Article 1.3 of the Contract. The price shall be the net price which results from the application of the $4 US/MW.h rebate to the price of assured secondary energy for use beyond Citizens Utilities Company's Service area as described in Article 7.2 of the Contract; i.e., the price shall be the border price which would be paid by Citizens Utilities to Hydro-Québec for the assured secondary energy for use by utilities beyond Citizens Utilities' service area.

7.3.4 Power and Energy Limits

If a Canadian utility were to accept more than one of the offers outlined above, a global limit of 100 MW for power and 657 GW.h in any calendar year for energy shall apply to all offers it accepts.

7.3.5 Adjusted Prices

In all of the above cases, the prices to Canadian utilities shall be as described above but shall be adjusted for any difference in the cost on Hydro-Québec's system of delivering the power and energy to a Canadian utility instead of to the export customer.

7.4 Environmental Impact

The evidence shows that all of the exports would come from existing hydraulic installations, which have been installed by the Applicant, or contracted for, to supply the Québec load. The Board is, therefore, satisfied that no material environmental impact would result from the production of the energy involved in this application.

7.5 The Board's Findings

The Board, having satisfied itself that the power and energy to be exported are surplus to reasonably foreseeable Canadian requirements and that the prices to be charged are just and reasonable in relation to the public interest, and having had regard to all other considerations that appear to it to be relevant, is prepared to issue the following licences:

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[1] As provided for under Section 7.3.1, Re-Offer of Firm Power and Energy.

1. a licence authorizing the export of firm power and energy to Citizens Utilities Company of the State of Vermont, from 15 March to 15 December of each year in the licence period, for a period of four years and eight and a half months, from 15 March 1986 to 30 November 1990, according to the terms of the Power and Energy Contract between Hydro-Québec and Citizens Utilities dated 5 August 1985 (applicable terms and conditions are set out in Appendix V);

2. a licence authorizing exports of assured secondary energy to Citizens Utilities Company of the State of Vermont for use in Citizens Utilities' service area for a period commencing the later of 1 January 1986 or the day the licence is approved by the Governor in Council to 31 December 1990, according to the terms of the Power and Energy Contract between Hydro-Québec and Citizens Utilities dated 5 August 1985 (applicable terms and conditions are set out in Appendix VI); and

3. a licence authorizing exports of assured secondary energy to Citizens Utilities Company of the State of Vermont for use by utilities beyond Citizens Utilities' service area, for a period commencing the later of 1 January 1986 or the day the licence is approved by Governor in Council to 31 December 1990, according to the terms of the Power and Energy Contract between Hydro-Québec and Citizens Utilities (applicable terms and conditions are set out in Appendix VII).

The foregoing constitute our Reasons for Decision and Decision in the matter of the present application of Hydro-Québec pursuant to Part VI of the *National Energy Board Act*.

J. Farmer
Presiding Member

A.D. Hunt
Member

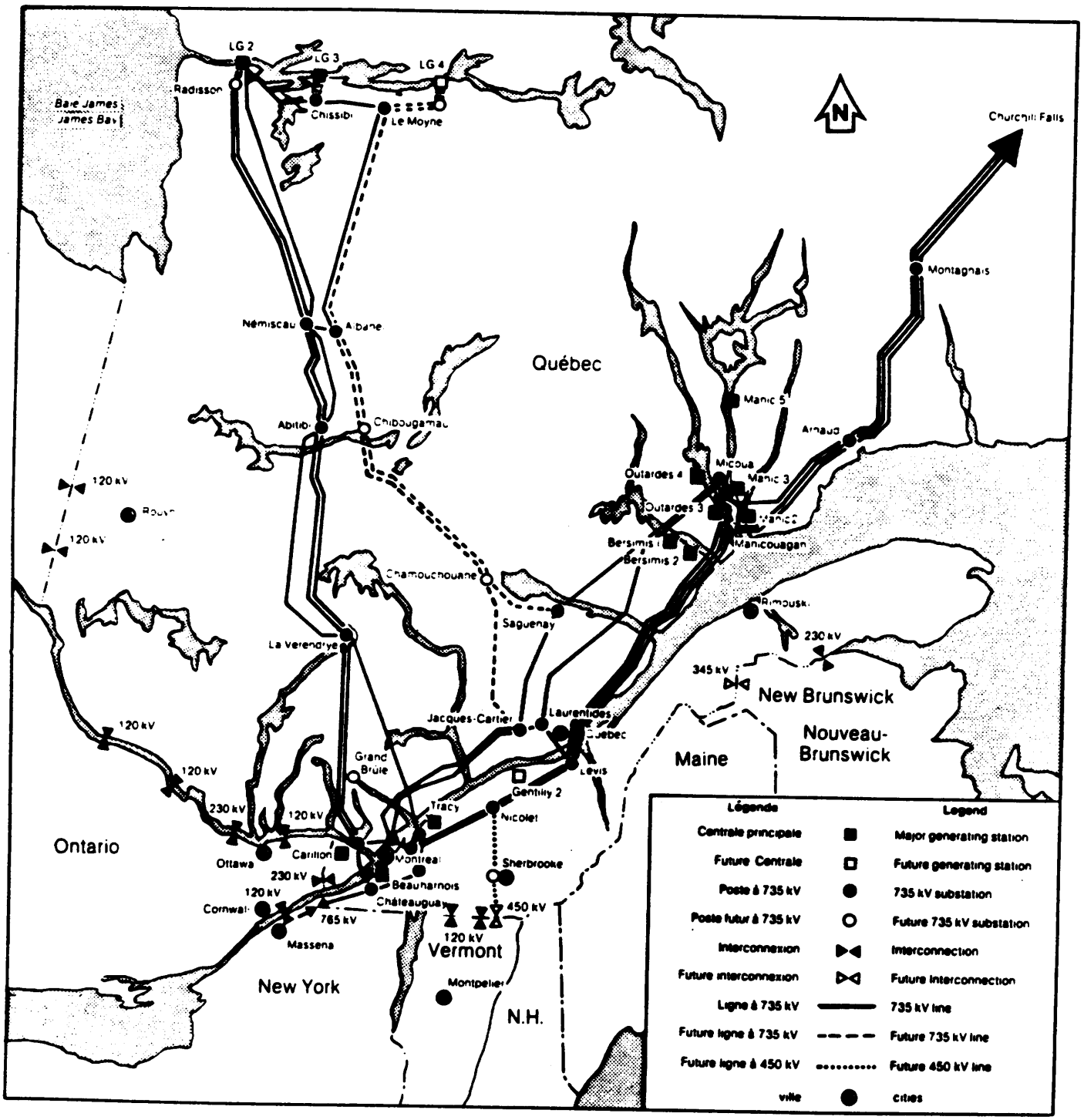
J.L. Trudel
Member

Appendix I
Map - System's Main Features in 1984

Figure a1-1
Hydro-Québec
System's Main Features in 1984

Hydro-Québec
Les principales installations en 1984

Hydro-Quebec
System's Main Features in 1984



Appendix II
Generating Stations in Service as of 31 December 1984

Table a2-1
Hydro-Québec
Generating Stations in Service as of 31 December 1984
Hydro-electric Stations

		MW
1.	LG-2	5 328
2.	LG-3	2 304
3.	LG-4	1 767
4.	Beauharnois	1 613
5.	Manic 5	1 292
6.	Manic 3	1 183
7.	Manic 2	1 015
8.	Bersimis 1	912
9.	Outardes 3	756
10.	Bersimis 2	655
11.	Carillon	654
12.	Outardes 4	632
	Others (less than 500 MW)	3 620
	Total hydro-electric	**2 1731**
	Thermal Stations	
1.	Gentilly 2 (nuclear)	685
2.	Tracy (oil)	600
3.	La Citière (gas)	201
4.	Cadillac (gas)	162
5.	Internal Combustion	100
	Total thermal	**1 748**
	Total of Generating Systems in service as of 31 December 1984	**2 3479**

Appendix III
Capacity, Demand and Excess of Power for the Months of March and December (1986-1990)

Table a3-1
Hydro-Québec
Capacity, Demand and Excess of Power for the Months of March and December

(MW)

		1986		1987		1988		1989		1990	
		Mar.	**Dec.**	**Mar.**	**Dec.**	**Mar.**	**Dec.**	**Mar.**	**Dec.**	**Mar.**	**Dec.**
1.	Capacity	28 323	28 756	28 314	28 352	28 390	28 413	28 510	29 530	29 541	29 545
2.	Regular Loads*	22 413	25 223	23 036	26 165	23 626	24 103	21 819	25 066	22 543	27 898
3.	Gross Excess (1-2)	5 910	3 533	5 278	2 187	4 764	4 310	6 691	4 464	6 998	1 647
4.	Required reserve	2 783	2 939	3 116	3 334	2 300	2 348	2 116	2 440	2 188	2 522
5.	Net excess (3-4)	3 127	594	2 162	-1 147	2 464	1 962	4 575	2 024	4 810	-875
6.	Emergency Aid **										
	interruptible loads	538	1 309	550	1 343	562	575	575	588	588	602
	neighbouring systems	500	500	500	500	500	500	500	500	500	500
	total	1 038	1 809	1 050	1 843	1 062	1 075	1 075	1 088	1 088	1 102
7.	Total excess (5+6)	4 165	2 403	3 212	696	3 526	3 037	5 650	3 112	5 898	227

* Includes domestic load plus all other firm commitments.
** Loads that could be interrupted or available power at the peak period (see Section 5.3 for a more detailed explanation).

Appendix IV
Capacity, Load and Excess of Energy (1985-1990)

Table a4-1
HYDRO-QUÉBEC
Capability, Load and Excess of Energy

	1985 *	1986	1987	1988	1989	1990
1. Total capability **	30.1	167.3	171.5	171.2	168.9	169.9
2. Regular load ***	25.8	138.5	138.6	138.5	133.7	140.3
3. Excess	4.3	28.8	32.9	32.7	35.2	29.6

* The quantities indicated for 1985 are for the months of November and December only.

** Total capability required to meet the regular load and to take advantage of the available export market, taking into account:
a) average streamflow conditions and normal system operation,
b) nuclear base load generation at 70 % annual capacity factor, and
c) thermal generation for isolated areas only.

*** Includes the domestic load based on a 3.4 % average annual growth rate scenario plus all other firm commitments.

Appendix V
Terms and Conditions of Export Licence EL-171

1. The term of this licence shall commence on 15 March 1986 and end on 30 November 1990.

2. The class of inter-utility export transfer authorized hereunder is sale transfers of firm power and energy.

3. The licensee shall not export power or energy hereunder, except during the period commencing 15 March and ending 15 December of each year during the period of the licence.

4. The power and energy to be exported hereunder shall be transmitted over the international power lines for which the Board has issued Certificate of Public Convenience and Necessity No. EC-III-17 and Exemption Orders No. XE-3-82 and No. XE-4-82 and over such other international power lines as the Board may authorize from time to time.

5. The power and energy to be exported hereunder shall be the "firm electric power and energy" as described in articles 1.1 and 1.2 of the Power and Energy Contract between Citizens Utilities Company and the Licensee dated 5 August 1985, hereinafter referred to as "the Contract".

6. In the event of a conflict between any conditions in the Contract and any conditions of this licence, the licence conditions shall prevail.

7. Any amendment or addition to, or termination or substitution of, the Contract shall not be effective until approved by the Board.

8. The quantity of power that may be exported hereunder shall not at any time exceed:

   (a) 48 MW during the 1986 calendar year,
   (b) 50 MW during the 1987 calendar year,
   (c) 52 MW during the 1988 calendar year,
   (d) 54 MW during the l989 calendar year, and
   (e) 56 MW during the 1990 calendar year.

9. The quantity of energy which may be exported hereunder shall not exceed

   (a) 205.0 GW.h during the 1986 calendar year,
   (b) 213.5 GW.h during the 1987 calendar year,
   (c) 222.1 GW.h during the l988 calendar year,
   (d) 230.6 GW.h during the 1989 calendar year, and
   (e) 239.2 GW.h during the 1990 calendar year.

10. The Licensee, before 1 January 1986, shall

   (a) offer, in writing, to each directly interconnected Canadian electrical utility, as a one-time offer that can be accepted in whole or in part, the power and energy proposed to be exported according to Articles 1.1 and 1.2 of the Contract at the price described in Articles 7.1.1 and 7.1.2 of this contract adjusted for any difference in the cost on Hydro-Québec’s system of

delivering the power and energy to the said Canadian electrical utility instead of to the export customer; and

(b) file with the Board copies of the written offers referred to in Subcondition (a).

11. The Licensee shall file with the Board copies of the responses to the written offers referred to in Subcondition 10(a).

12. The Licensee shall interrupt or reduce the delivery of power and energy hereunder whenever, or to whatever extent such power and energy are required to supply firm loads within Québec.

13. The Licensee shall not operate its thermal units, nor shall it purchase power or energy, in order to carry out the exports hereunder.

14. The price to be charged for exports of power and energy hereunder shall not be less than the prices described in Articles 7.1.1 and 7.1.2 of the Contract.

15. The Licensee shall, with in 15 days after the end of each month within the period beginning 15 March and ending 15 December of each year throughout the term of this licence, file with the Board a report, in such form and detail as the Board may specify, setting forth for that month information pertaining to transactions under the licence.

Appendix VI
Terms and Conditions of Export Licence EL-172

1. The term of this licence shall commence on the later of
   (a) 1 January 1986, or
   (b) the day of its approval by Governor in Council, and shall end on 31 December 1990.

2. The power and energy to be exported hereunder shall be transmitted over the international power lines for which the Board has issued Certificate of Public Convenience and Necessity No. EC-111-17 and Exemption Orders No. XE-3-82 and No. XE-4-82 and over such other international power lines as the Board may authorize from time to time.

3. The energy to be exported hereunder will be the "assured secondary energy" as described in Article 1.3 of the Power and Energy Contract between Citizens Utilities Company and the Licensee dated 5 August 1985, hereinafter referred to as "the Contract".

4. In the event of a conflict between any conditions in the Contract and any conditions of this licence, the licence conditions shall prevail.

5. Any amendment or addition to, or termination or substitution of, the Contract shall not be effective until approved by the Board.

6. The maximum rate of export of energy hereunder shall not exceed 100 MW less any quantity of power exported pursuant to licences EL-171 and EL-173 to be issued by the Board.

7. The quantity of energy that may be exported hereunder shall not exceed 657 GW.h during any calendar year throughout the term of the licence less any amount of energy exported during the same twelve-month period pursuant to licences EL-171 and EL-173 to be issued by the Board.

8. The Licensee, before 1 January 1986. shall
   (a) offer, in writing. to each directly interconnected Canadian electrical utility, as a one-time offer that can be accepted in whole or in part, the assured secondary energy proposed to be exported according to Article 1.3 of the Contract for use in Citizens Utilities Company’s service area. The price of the energy that is offered shall be the price described in Article 7.2 of this contract for the energy used in Citizens Utilities Company’s service area adjusted for any difference in the cost on Hydro-Québec’s system of delivering the energy to the said Canadian electrical utility instead of to the export customer; and
   (b) file with the Board copies of the written offers referred to in Subcondition (a).

9. The Licensee shall file with the Board copies of the responses to the written offers referred to in Subcondition 8(a).

10. The Licensee may export energy hereunder whenever and to whatever extent such energy is not required to supply
    (a) the Licensee’s firm load requirements,
    (b) any firm load of any Canadian electrical utility directly interconnected with the Licensee’s system which lacks generating capacity to meet such firm load, and

(c) any Canadian electrical utility directly interconnected with the Licensee's system that has accepted the offer referred to in Subcondition 8(a).

11. The Licensee shall not operate its thermal units nor shall it purchase power or energy in order to carry out the exports hereunder.

12. The price to be charged for exports of energy hereunder shall not be less than the price described in Article 7.2 of the Contract for the energy used in Citizens Utilities Company's service area.

13. The Licensee shall submit for approval by the Board a report of each decision on amending the amounts of power and energy under Article 1.3 of the Contract made by the Operating Committee described in Article III of the Contract.

14. The Licensee shall, within 15 days after the end of each month during the term of this licence, file with the Board a report, in such form and detail as the Board may specify, setting forth for that month information pertaining to transactions under the licence.

Appendix VII
Terms and Conditions of Export Licence EL-173

1. The term of this licence shall commence on the later of
   (a) 1 January 1986, or
   (b) the day of its approval by Governor in Council, and shall end on 31 December 1990.

2. The power and energy to be exported hereunder shall be transmitted over the international power lines for which the Board has issued Certificate of Public Convenience and Necessity No. EC-111-17 and Exemption Orders No. XE-3-82 and No. XE-4-82 and over such other international power lines as the Board may authorize from time to time.

3. The energy to be exported hereunder will be the "assured secondary energy" as described in Article 1.5 of the Power and Energy Contract between Citizens Utilities Company and the Licensee dated 5 August 1985, hereinafter referred to as "the Contract".

4. In the event of a conflict between any conditions in the Contract and any conditions of this licence, the licence conditions shall prevail.

5. Any amendment or addition to, or termination or substitution of, the Contract shall not be effective until approved by the Board.

6. The maximum rate of export of energy hereunder shall not exceed 40 MW.

7. The quantity of energy that may be exported hereunder shall not exceed 263 GW.h during any calendar year throughout the term of the licence.

8. The Licensee, before 1 January 1986, shall
   (a) offer, in writing, to each directly interconnected Canadian electrical utility, as a one-time offer that can be accepted in whole or in part, the assured secondary energy proposed to be exported according to Articles 1.3 and 1.5 of the Contract for use beyond Citizens Utilities Company's service area. The price of the energy that is offered shall be the net price which results from the application of the $ 4 US/MW.h rebate to the price of assured secondary energy for use beyond Citizens Utilities Company's service area as described in Article 7.2 of the Contract, adjusted for any difference in the cost on Hydro-Québec's system of delivering the energy to the said Canadian electrical utility instead of to the export customer; and
   (b) file with the Board copies of the written offers referred to in Subcondition (a).

9. The Licensee shall file with the Board copies of the responses to the written offers referred to in Subcondition 8(a).

10. The Licensee may export energy hereunder whenever and to whatever extent such energy is not required to supply
    (a) the Licensee's firm load requirements,
    (b) any firm load of any Canadian electrical utility directly interconnected with the Licensee's system which lacks generating capacity to meet such firm load, and
    (c) any Canadian electrical utility directly interconnected with the Licensee's system that has accepted the offer referred to in Subcondition 8(a).

11. The Licensee shall not operate its thermal units nor shall it purchase power or energy in order to carry out the exports hereunder.

12. The price to be charged for exports of power and energy hereunder shall not be less than the net price which results from the application of the $ 4 US/MW.h rebate to the price of assured secondary energy for use beyond Citizens Utilities Company's service area as described in Article 7.2 of the Contract.

13. The Licensee shall, within 15 days after the end of each month during the term of this licence, file with the Board a report, in such form and detail as the Board may specify, setting forth for that month information pertaining to transactions under the licence.