SUPERIOR COURT

NO: 05-04841-72

CHIEF ROBERT KANATEWAT et al,

Petitioners -

Requérants

-vs-

THE JAMES BAY DEVELOPMENT CORPORATION et al,

Respondents -

Intimées

-and-

THE ATTORNEY GENERAL OF CANADA,

Mis-en-cause.

JUDGMENT - JUGEMENT

I N D E X

English Text

CANADA

PROVINCE OF QUEBEC

DISTRICT OF MONTREAL

SUPERIOR COURT

CASE NO: 05-04841-72

The 15 November 1973.

PRESENT:

THE HONOURABLE MR JUSTICE
ALBERT H. MALOUF

CHIEF ROBERT KANATEWAT, CHIEF JOHN MARK, CHIEF MATTHEW SHANUSH, CHIEF BILLY DIAMOND, CHIEF PETER GULL, CHIEF SMALLY PETAWABANO, ACTING CHIEF DAVID SANDY, BERTIE WAPACHEE, personally and on behalf of the members of the Indian bands of Fort George, Old Factory, Eastmain, Rupert House, Waswanipi, Mistassini, Great Whale River and Nemaska, and the said bands and the band councils thereof, MALCOLM DIAMOND, CHIEF ANDREW T. DELISLE, CHIEF MICHAEL MCKENZIE, CHIEF MAX "ONE-ONTI" GROS LOUIS, SILAS COOKIE personally and on behalf of the Great Whale River Inuit Community, JOHN WATT, CHARLIE WATT, ZEBEDEE NUNGAK, THE INUIT COMMUNITY COUNCIL OF FORT CHIMO AND THE NORTHERN QUEBEC INUIT ASSOCIATION,

Petitioners

-vs-

THE JAMES BAY DEVELOPMENT CORPORATION, THE JAMES BAY ENERGY CORPORATION, DESJARDINS, SAURIOL AND ASSOCIATES, CAUTH ENTREPRISES LTEE, LES ENTREPRISES KIEWIT LTEE, DESOURDY CONSTRUCTION LTEE, SIMARD-BEAUDRY INC., BOT CONSTRUCTION (CANADA) LTEE, SOCIETE ENTREPRISES GENERALES LTEE, LAMOTHE QUEBEC INC., SIMARD-DENIS INC., LES DEVELOPPEMENTS DU NORD-EST LTEE, LES CONSTRUCTIONS DU ST-LAURENT LIMITEE, FRANCON LIMITEE, TURNBULL CONSTRUCTION INC., REGIS TRUDEAU ET ASSOCIES, SOCIETE D'INGENIERIE SHAWINIGAN LIMITEE, ROUSSEAU SAUVE WARREN INC. STANDARD STRUCTURAL STEEL OF CANADA LTD., MARCEL BARIL LTEE, GOODCO LTEE, LES PONTS MODERNES DU QUEBEC, CANADIAN NATIONAL RAILWAY COMPANY, LALONDE GIROUARD LETENDRE ET ASSOCIES LTEE and M.N.R., and QUEBEC HYDRO ELECTRIC COMMISSION (HYDRO-QUEBEC),

Respondents

-and-

THE ATTORNEY GENERAL OF CANADA, representing Her Majesty the Queen in Right of Canada,

Mis-en-cause

JUDGMENT

PART 1

PRELIMINARIES

1. Opening remarks.

This has been a long hearing. Legal argument commenced in November 1972 and the parties started to adduce proof on December 11th. In all one hundred and sixty-seven witnesses were heard and three hundred and twelve exhibits filed. The argument took place in June when the case was taken under advisement.

During the course of the hearing a most unfortunate event occurred. Me Jacques Beaudoin, one of the attorneys for respondents, suffered a severe heart attack, was hospitalized and died several weeks later. His loss was a great blow to the remaining attorneys of petitioners who were obliged to add his load of work to their own. His death was most untimely being 41 years of age. The Court and attorneys representing both parties presented their sincere condolences to the widow and children.

2. Definitions.

In this judgment the following words mean:

Bill-50: James Bay Region Development Act. 1971 Statutes of Quebec ch. 34.

Development Corporation: The James Bay Development Corporation.

Energy Corporation: The James Bay Energy Corporation.

The Territory: The territory which is described in the schedule of Bill-50: "The territory of the James Bay region shall comprise the territory bounded to the west by the west boundary of the Province of Quebec, to the south by the parallel of latitude 49°00' North, to the east by the electoral districts of Roberval, Dubuc and Saguenay and by the extension northerly of the west boundary of the electoral district of Saguenay and to the north by the parallel of latitude 55°00' North."

Eskimo and Inuit are used synonymously.

The term "Indians" whenever used in the present judgment will be taken to include the Eskimo. Authority for this state-

ment is found in the Matter of a reference as to whether the term "Indians" in Head 24 of section 91 of the British North America Act, 1867, includes Eskimo inhabitants of the Province of Quebec 1939 S.C.R. 104, which was cited with approval by Hall J. delivering the judgment of the Supreme Court in Sigeareak -vs- the Queen 1966 S.C.R. 645 at p. 650. During the course of the argument, attorneys for respondents submitted that the said case is applicable only to the term "Indians" within the meaning of Head 24 of section 91 of the B.N.A. Act. This argument finds no support in the opinions of the judges of the Supreme Court who rendered this decision. The Chief Justice referred to a census taken in the mid 19th Century which included "Eskimo" in the general description of "Indians". He goes on to say that the Eskimo were recognized as an Indian tribe by officials of the Hudson's Bay Company at the time of Confederation. With respect to the Eskimo inhabiting the coast of Labrador, he refers to conclusive evidence that they were treated and classified as Indians by the local authorities and he cites many official documents in support of this affirmation. At page 114 he says "Thus it appears that, through all the territories of British North America in which there were Eskimo, the term "Indian" was employed by well established usage as including these as well as the other aborigines and I repeat the British North America Act, in so far as it deals with the subject of Indians, must, in my opinion, be taken to contemplate the Indians of British North America as a whole." Cannon J. said that the English word "Indians" was equivalent to or equated the French word "Sauvages" and included all the present and future aborigines native subjects of the proposed Confederation of British North America, which at the time was intended to include Newfoundland. Kerwin J. referred to many documents to show that Eskimo were included in the term Indians and was considered as one of the Indian tribes.

3. Nature of proceedings.

Petitioners have instituted the present proceedings on their own behalf and on behalf of 1,271 Cree Indians and 384 Eskimo who signed the powers of attorney Ex P-1 and P-2 authorizing

petitioners to represent them in the present proceedings pursuant to article 59 of the Code of Civil Procedure. All the Cree Indians, with the exception of petitioners Chief Delisle, Chief McKenzie and Chief Gros Louis and 329 who live in Great Whale Post, reside in the territory. The number of Cree Indians from each Band who signed the power of attorney P-1 are as follows: Mistassini 227, Waswanipi 96, Nemiska 2, Eastmain 82, Rupert House 97, Paint Hills (also known as Old Factory Band and Vieux Comptoir) 105, Fort George 560, Great Whale River 102, making a total of 1,271. Of the Inuits who signed the power of attorney P-2, 181 are residents of Fort Chimo and the remaining 203 reside in Great Whale River.

The respondent Development Corporation was constituted by Bill-50 which was assented to by the National Assembly of Quebec on 14 July 1971. Bill-50 authorized the respondent Development Corporation to develop the natural resources in the territory and also provided that the development of hydroelectric resources in the territory be carried out by a subsidiary not less than a majority of whose shares will be held by Hydro-Quebec and not more than 40% by the Development Corporation. In order to give effect to this provision the James Bay Energy Corporation was incorporated by letters patent issued 20 December 1971. Respondent Hydro-Quebec is carrying out some works adjacent to the territory which will affect the rivers and lakes north of the territory. The remaining respondents are carrying out works in the territory pursuant to contracts entered into with the Development Corporation and/or the Energy Corporation.

In their application for an interlocutory order of injunction, petitioners seek an order refraining respondents from carrying out certain major works in the territory and adjacent thereto on the ground that such works are interfering with and causing prejudice to the personal and usufructuary rights which Cree Indians and Inuits have exercised and are presently exercising in all of northern Quebec including trapping, hunting and fishing rights.

Before considering the evidence submitted by the parties it is well to keep in mind that the powers of the Court on application for an interlocutory order of injunction are not the same as the powers which the Court possesses when it hears the application

for the final and permanent injunction. This Court can now only determine whether the rights of the parties should be kept in statu quo until the final hearing on the merits takes place and consequently it must avoid making a final determination of the issues involved. It is for this reason that in respect to certain matters this Court will not make a final ruling but will simply state whether the facts are serious enough to entitle petitioners to a final hearing on the merits.

This doctrine is well expressed by the following authors and jurisprudence.

Kerr on Injunctions 6th edition 1927 p. 15 says:

> "In exercising the jurisdiction, the Court does not pretend to determine legal rights to property, but merely keeps the property in its actual condition until the legal title can be established. The Court interferes on the assumption that the party who seeks its interference has the legal right which he asserts but needs the aid of the Court for the protection of the property in question until the legal right can be ascertained. The office of the Court to interfere being founded on the existence of the legal right, a man who seeks the aid of the Court must be able to show a fair prima facie case in support of the title which he asserts. He is not required to make out a clear legal title, but he must satisfy the Court that he has a fair question to raise as to the existence of the legal right which he sets up; and that there are substantial grounds for doubting the existence of the alleged legal right, the exercise of which he seeks to prevent."

High, Injunctions 4th edition vol. 1 at p. 8 makes a similar observation:

> "It is to be constantly borne in mind that in granting temporary relief by interlocutory injunction, courts of equity in no manner anticipate the ultimate determination of the questions of right involved. They merely recognize that a sufficient case has been made out to warrant the preservation of the property or rights in issue in statu quo until a hearing upon the merits, without expressing and indeed without having the means of forming a final opinion as to such rights. And in order to sustain an injunction for the protection of property pendente lite it is not necessary to decide in favor of plaintiff upon the merits, nor is it necessary that he should present such a case as will certainly entitle him to a decree upon the final hearing, since he may be entitled to an interlocutory injunction, although his right to the relief prayed may ultimately fail."

Brossard J. in Perusse et Papa v. Les Commissaires d'Ecoles de St-Leonard de Port Maurice (1970) C.A. 324 expressed himself as follows at p. 329:

"L'injonction finale s'accorde ou se refuse après l'instruction entière et finale du litige engagé entre les parties; le jugement qui l'accorde ou la refuse doit se fonder sur une reconnaissance finale et motivée des droits réels des parties tels que découlant de la loi et tels qu'appuyés sur des faits dont la certitude découle d'une preuve complète et elle-même finale; les conséquences, autres que les conséquences juridiques, de l'octroi ou du refus de l'injonction ne peuvent entrer en ligne de compte.

L'injonction interlocutoire, au contraire, peut, suivant l'article 752 C.P., être accordée si celui qui la demande paraît, à ce stade du litige, y avoir droit à raison des faits allégués et mis en preuve et si, eu égard à ce droit apparent, elle peut être jugée nécessaire pour empêcher que ne soit causé au requérant un préjudice sérieux ou irréparable ou que ne soit crée un état de fait ou de droit de nature à rendre le jugement final inefficace.. Le juge auquel elle est demandée ne peut, soit pour l'accorder, soit pour la refuser, donner à la preuve qui lui est présentée, à ce stade, l'effet d'une preuve finale offerte pour adjudication sur le mérite de l'action; il lui suffit de l'apprécier de façon à être en mesure de décider si le requérant paraît ou ne paraît pas avoir un droit sérieux et valable à faire valoir; quant au droit, c'est sur une apparence sérieuse du droit du requérant à obtenir que le poursuivi s'abstienne ou cesse de faire une opération déterminée, et quant aux conséquences de l'octroi ou du refus de l'injonction, c'est sur la probabilité sérieuse que, dans un sens ou dans l'autre, il se produira un état de fait ou de droit auquel le jugement final ne pourra remédier, que le juge doit se guider pour rendre sa décision interlocutoire. Bref, le sort de la demande interlocutoire dépend de l'apparence plus ou moins substantielle des droits apparents qui s'affrontent et des risques sérieux que ces droits apparents subissent des accrocs irréparables suivant que l'injonction est accordée ou refusée.

4. Description of the region

The territory forms part of Northern Quebec or the region which is presently called New-Quebec. The region which interests us in the present case was formally part of the area known as Rupert's Land and part also of that great tract of land which was ceded by Charles 11 to the Hudson's Bay Company. The admission of 6 March acknowledges that the works which are being carried out within the framework of Bill-50 are in fact being carried out in part of the area previously known as Rupert's Land. According to exhibit P-5, James Bay is bounded to the west by the Ontario border, to the south by the 49th parallel, to the north by the 55th parallel and to the east by the Gulf of St. Lawrence. It is an area of about

the whe of Quebec. It is more
0% of area of France. In
ime Pr nces. The southern
miles th of Montreal and
500 s. East-west, its
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-4. Th dians and particularly
P-5 i ate where the hydro-

the people living in the terri-

and Inuit population of the
pulation of the following settle-
territory, namely Eastmain, Fort
Rupert, Waswanipi and Mistassini,
Great Whale Post which is located
st above the 55 ° of latitude, is
of Great Whale Post is 565 and
closer to the Koksoak River near
Eskimo settlements north of the
ese figures are found on page A2

ologist, testified that members
Mistassini Lake area as early as
isiting Lake Mistassini is Father
et a number of Indians and their
on the Rupert River where he met
people and then continued to
e Bay where he met another group
on of the location, could be the
om the 17th century when two posts
, one by Louis Joliette, and the
operation until the present day,
's Bay had a trading post at Lake

Gull as early as 1793 and in 1819 established a Post on Waswanipi Lake which continued in operation until 1965. Throughout the 19th century missionaries from both the Roman Catholic Church and the Anglican Church referred to the number of converts from the Waswanipi people, and the continuity of the people is assumed from their description. Witness took as a sample 68 heads of families in the Waswanipi Band and was able to determine that 66 are direct biological descendants of the people who resided there in 1915. Two were not direct biological descendants and have moved from Rupert House to Waswanipi. The Isheroff family can be traced back to 1817. Canon Isheroff, who died in 1965, himself gave a history of his own childhood at the Waswanipi Post. The Isheroffs' themselves are now members of several Bands including Rupert House, Mistassini and Waswanipi.

Bishop JAMES WATTON, bishop of the diocese of Moosonee, which covers 350,000 square miles of Northern Quebec and Ontario, including Fort George and the coast up to the top of James Bay, says that the registers of Indians go back to approximately 1790. Fort George and Rupert Band Indians can trace their ancestry to 1850. The registers consist of church records of baptism, marriages and burials. Other sources are diaries, letters and Hudson's Bay records as well as photos of people and places on the east coast taken before the turn of the century. He relates these people to the same group of Cree Indians mentioned in the powers of attorney exhibits P-1 and P-2.

ADRIAN TANNER, anthropologist and lecturer, states that diaries of missionaries and traders indicate that the Indian Bands who occupy lands in the territory today are related to the Indians who resided in the territory since 1850 and that those who were there in 1850 were descendants from the Aboriginal inhabitants. The whole territory was used as hunting grounds by ancestors of Indians now living therein. In re-examination he states that Indians were living in the coastal area before the Hudson's Bay Company established its post in the late 17th century.

According to EDWARD S. ROGERS, doctor of philosophy and anthropology, records indicate that the Cree Indians presently

residing in the Mistassini area, are descendants from Cree Indians who were living in that same area in the 17th century. Tools found in that area indicate that ancestors of the present Indians were living in that area prior to the 17th century and there is no evidence to show any major mass movement of peoples in the whole area.

IGNATIUS EDWIN LARUSIC, who has carried out research on the history of the Cree Indians, states that documents dated from 1660 show that Indians have lived continuously in the territory since that date.

Professor SANDERS, an anthropologist, states that the area (including the territory) outlined in red on exhibit P-3, has been inhabited by Cree Indians from the date that records and information first became available.

Anthropologist BERTRAND, produced as a witness by the respondents, states that Cree Indians lived in New-Quebec before the year 1600.

The admissions filed by the parties on 15 January and 7 February taken together state that Cree Indians and Inuits have been living in the territory as well as in Fort Chimo and Great Whale River and in the immediate vicinity thereof since 1850.

In order to dispell any notion which one might have of the Cree Indians being other than a peaceful people, I refer to the testimony of professor Sanders who stated that in the material which he examined there is no reference to any armed conflict between Indians and Non-Indians in the territory. The relationship was generally one of the best that has occurred historically in this country between colonists and native people.

At p. 11 of his testimony he made the following statement:

A "During the period of the fur trade, Indian people were in fact economic partners in the major economic activity of the colonists and of the colonial settlement, therefore, they had a place in the society which was buttressed in a sense both economically and politically and which was probably superior to any place that they have had since that period ended. Therefore, I'm saying that the relationship between the colonists and the Indians in the fur trade situation would be an amicable one."

LARUSIC who studied Indian-White contact from the point of view of economic and political relations states that his

study has not revealed any incidents of armed conflict or agressive overcoming of one group over the other. The relations between the Whites and the Indians were always quite good and very amicable.

6. The objections taken under reserve.

a) the quality and interest of petitioners

Attorneys for respondents submit that some of the petitioners do not have the necessary legal interest or quality to institute the present proceedings. Chief Delisle is described in the amended writ as Executive residing and domiciled in Caughnawaga, Quebec. According to his testimony he has been president of the Indians of Quebec Association since 1965, Chief of the Caughnawaga Band and a councillor for 6 years. Chief McKenzie is described in the amended writ as Band Chief residing and domiciled in Kipewa, Quebec. He did not appear as a witness. Chief Gros-Louis is described in the amended writ of summons as Band Chief and Executive residing and domiciled in Village des Hurons, Quebec. Appearing as a witness he said that he is secretary-treasurer of the Indians of Quebec Association. In paragraph 3 of the amended declaration and the amended petition for an interlocutory injunction, Chiefs Delisle, McKenzie and Gros-Louis are described as members of the executive of the Indians of Quebec Association, a group representing all the Indian Bands of the Province of Quebec. These 3 Chiefs do not reside in the territory or the lands adjacent thereto and consequently have no interest therein. The fact that they are executives of the said association does not give them the necessary legal interest to institute proceedings as required by article 55 of the Code of Civil Procedure.

The INUIT COMMUNITY COUNCIL OF FORT CHIMO, and the NORTHERN QUEBEC INUIT ASSOCIATION are both described in the writ as corporations duly incorporated having their head office in Fort Chimo, Quebec. The letters patent incorporating these associations were issued by virtue of the provisions of the Canada Corporations Act and are produced together as exhibit P-125. These associations have no capacity other than that conferred by the Canada Corporations

Act and although the individual members may have the interest required by article 55 C.C.P., the Associations are not themselves entitled to exercise the rights of their members. In l'Association des Propriétaires des Jardins Taché Inc. et al vs. Les Entreprises Dasken Inc. et al 26 D.L.R. (3d) 79 the Supreme Court held that an association incorporated under Part 111 of the Quebec Companies Act does not entitle it to exercise the rights of its members. The Court approved the statement of Casey J. of the Quebec Court of Appeal who stated "The Association does not own property and the fact that its members may have the interest required by art. 55 C.C.P does not exempt it from the rule of art. 59 C.C.P."

The Court, therefore, declares that Chief Andrew T. Delisle, Chief Michael McKenzie, Chief Max Gros -Louis, Inuit Community Council of Fort Chimo and Northern Quebec Inuit Association have no interest to institute the present proceedings and their application for an interlocutory order of injunction is therefore denied.

The description of the remaining petitioners is given in the amended writ. They are all described as chiefs, hunters, or trappers residing in the region and consequently all have an interest in the present proceedings. I should add that by the admission of January 15th, the parties admitted that the names of the Cree Indians which appear on the powers of attorney produced as exhibit P-1 as well as that of petitioners (with the exception of Chiefs Delisle, McKenzie and Grois-Louis as well as with the exception of the Inuits) live in the territory covered by Bill-50. By the admission of 7 February, the parties admitted that the names of the Inuits which appear on the powers of attorneys produced as exhibit P-2 as well as petitioners Silas Cookie, John Watt, Charlie Watt and Zebedee Nungak live in Fort Chimo, Great Whale and the surrounding areas. The said petitioners and the persons whom they represent by virtue of the said powers of attorney are therefore properly before this Court.

The fact that there is a slight difference in the description and designation of the petitioners in the petition and declaration on the one hand and the writ of summons on the other hand is slightly confusing but is not important. There is in effect, no band or band council as such before this Court.

b) the admissibility of treaties

The Court permitted the production as evidence of 14 treaties (exhibit P-15). One of the parties to each of the treaties is the Crown or the Government of Canada and consequently each treaty falls within the category of documents which can help this Court determine the nature and extent of the Indian right referred to in the Laws of 1912. An examination of the treaties bears this out. Representatives of His Majesty signed the Robinson Superior and Robinson Huron Treaties. At p. 6 of the document containing treaties 1 and 2, there is a copy of the Order in Council dated 30 April 1875 wherein references are made to the treaties as being binding on the Government of Canada. The document containing treaty No. 3 contains an Order in Council dated 25 April 1871 setting up the Commission for treaty No. 3 and authorizing the signature of the said treaty. The document containing treaty No. 4 contains an Order in Council P.C. no. 944 dated 23rd July 1874 setting up the Commission and another Order in Council P.C. no. 1332 dated 4 November 1876 approving the said treaty. Treaty No. 5 was signed by the Lieutenant-Governor of the Province of Manitoba and one James McKay representing the Queen. Treaty No. 6 was signed by representatives of the Queen and there are several adhesions which were subsequently entered into, the last one dated 15 May 1956 referring to previous payments. The document containing Treaty No. 7 contains a copy of Order in Council P.C. No. 650 dated 12 July 1877 authorizing the setting up of a Commission for the said treaty. The document containing Treaty 8 contains an Order in Council P.C. no. 2749 adopted in 1898 setting up the Commission for the said Treaty as well as adhesions which were subsequently entered into. Treaty No. 9, entered into in 1905 and 1906, was signed by representatives of His Majesty. This document does not contain any Order in Council authorizing the signature of the treaty but does contain at p. 29 a copy of Order in Council P.C. 2547 dated 5 November 1930 approving the adhesions. The document containing treaty No. 10 contains Order in Council P.C. 1459 adopted in 1906 setting up the Commission for the signature of the said treaty and Order in Council P.C. 2490 ratifying the treaty.

The document containing treaty No. 11 contains Order in Council P.C. 3985 dated 22 October 1921 ratifying the said treaty and another Order in Council dated 29 March 1929 ratifying the adhesions. The documents containing the treaties with the Chippewa and the Mississauga Indians show that the treaties were signed by representatives of the Crown and contain copies of agreements entered into between the Dominion of Canada and the Province of Ontario concerning Indian title to certain lands.

All these treaties therefore have a particular bearing on this case and all the objections raised by respondents in respect thereof cannot be retained and are dismissed.

c) the admissibility of the documents filed as exhibits P-20, P-21, P-22, P-23 and P-24

Exhibit P-20 is a list identifying certain inter-governmental documents. P-21 is a list of other documents from archives and departmental records. The documents referred to in P-20 and P-21 are all produced together as exhibit P-22, 1 to 62 inclusive. P-23 is an additional list of other documents from departmental records. The documents referred to in P-23 are all produced together as exhibit P-24, 1 to 5 inclusive.

In order to decide on the admissibility of these documents it is necessary to refer to legislation, enacted by both the Federal and Provincial Parliaments in the year 1912, by virtue of which the boundaries of this Province were extended to include the area which is subject to dispute in the present proceedings. The Quebec Boundaries Extension Act 2 George V ch 45, assented to by the Federal Parliament on 1 April 1912 which extended the boundary of the Province of Quebec as aforesaid contains a provision, section 2c, which reads as follows:

> "That the Province of Quebec will recognize the rights of the Indian inhabitants in the territory above described to the same extent, and will obtain surrenders of such rights in the same manner, as the Government of Canada has heretofore recognized such rights and has obtained surrender thereof....."

In the Act respecting the extension of the Province of Quebec by the annexation of Ungava, 2 George V ch. 7, assented to by

the Quebec Legislature on 3 April 1912, the Province of Quebec consented that the territory therein described form part of the Province upon the terms and conditions set forth in the Quebec Boundaries Extension Act.

Since this legislation obliged the Province of Quebec to treat the Indians in the same manner as the Government of Canada, it becomes necessary for this Court to define the term "Government of Canada", and to determine the nature and extent of the Indian rights referred to in the said section. In view of the terminology used in section 2c (supra) petitioners may file documents to show in what way the Government of Canada treated the Indians.

What is the meaning of the term "Government of Canada". Under the B.N.A. Act 1867 section 9, the executive government and authority of and over Canada is vested in the Queen. Section 10 provides that the Governor General carries on the Government of Canada on behalf of the Queen, and section 11 that the Privy Council for Canada shall aid and advise in the Government of Canada. The Interpretation Act R.S.C. 1970 ch. 23 defines the term "Governor General" as the Governor General of Canada or the Chief Executive Officer carrying on the Government of Canada on behalf and in the name of the Sovereign and defines the term "Governor General in Council" as the Governor General of Canada acting by or with the advice of, or by and with the advice and consent of, or in conjunction with the Queen's Privy Council for Canada.

It is clear therefore that any Order in Council adopted by the Government of Canada, any agreement and any treaty authorized by the Crown or the Government of Canada relevant to this case may befiled as evidence and considered by the Court in helping to determine the manner in which the Government of Canada treated the Indians.

Consequently with respect to P-22, the Court permits the production as evidence of the following documents:

P-22/1 Order in Council P.C. 2626 dated 14 January 1910.

P-22/2 Order in Council P.C. 801 dated 29 April 1910

P-22/36 Order in Council P.C. 1823 dated 25 January 1897.

P-22/42 Order in Council P.C. 1569 dated 1 August 1907.

P-22/45 Order in Council P.C. 1593 dated 22 July 1908.

P-22/46 Agreement of Abitibi Dominion Band dated 22 June 1908.

P-22/19 consists of a resolution passed by the Legislative Assembly of the Province of Quebec on 27 April 1909 authorizing the Lieutenant-Governor in Council to enter into negotiations with the Governor of Canada in Council respecting the annexation of the territory therein described to the Province of Quebec. Since the Court has not been shown any Order in Council enacted subsequent thereto the production of this document cannot help the Court. Order in Council P.C. 2623 dated 8 July 1896 filed as exhibit P-22/34 is not pertinent to the present proceedings. The objection is maintained insofar as the remaining documents filed as exhibits P-22 are concerned. The documents filed as exhibit P-24 are letters exchanged between Public Officials and Members of the Public and are therefore excluded.

d) general

During the hearing the Court took under reserve many objections which were made by the parties concerning the admissibility of certain proof. It is now necessary to arrive at a decision in respect thereof.

The objection raised on 29 January at page 111 of the testimony of Skinnarland concerning the effects of perma-frost on the construction of roads is dismissed; the objection concerning the response of the same witness given 30 April at page 26 concerning the facility of cutting trees for a spillway is dismissed; seeing the testimony of Sanders on 7 March the objection concerning the testimony of Cook rendered 5 February at page 28 concerning the culverts is dismissed; the attorney for petitioners having failed to make any

proof that the ground is in the same condition that it was in 1957, the objection raised on 5 February at page 52 of the testimony of Cook to the production of the photos taken in 1957 and filed as exhibit P-49 is maintained; the objection raised at page 43 of Cook's testimony dated 6 February concerning the percentage of wetland habitats in the basins is maintained because the witness had already given the said percentages; the objection raised at page 54 to a portion of Cook's testimony of 6th February is maintained because this part of his testimony was the subject of a cross-examination in chief; the objection made on 12 February concerning the production by Delisle at page 113 of his testimony of a letter of agreement by the Minister of Tourism as exhibit P-59 is dismissed; the objection raised on 13 February at page 108 of the testimony of Ballinger who affirmed that he did not receive any application from respondents is dismissed; the objection raised 7 March at page 57 of the testimony of Sanders concerning the extinction of Indian claims in the territory is dismissed; the objection raised 7 March at page 103 of the testimony of McCart is dismissed; the general objection raised on 7 March at page 8 of the testimony of Sanders is dismissed; the objections which are found on pages 21, 23, 25, 39 and 41 of the testimony of the same witness concerning the treaties therein mentioned are all dismissed.

Insofar as the proof produced by respondents is concerned, the Court now proceeds to deal with the objections raised. The objection of 8 March at page 35 concerning the production of exhibit I-5 by the witness Langlois is dismissed; the objections raised on 9 March concerning certain portions of the testimony of Langlois at pages 1 and 66 are dismissed; the portion of Steinmann's testimony rendered 12 March at page 50 concerning the difference between the health of the Eskimo at the time of his arrival in the territory to that which exists today is maintained because it is not pertinent to the present hearing; the objection raised at page 62 of the testimony of the same witness concerning the reunion at Povungnituk is dismissed; the objection raised at page 133 of the testimony of de Bellefeuille of 12 March is dismissed; the objection at page 2 of the testimony of the same witness of 13 March is dismissed.

The objections concerning the documents I-10 and I-11 which were produced by Lepage on 13 March are dismissed and the objection at page 81 concerning the testimony of the same witness is dismissed; the objections of 13 March to the production by Dr. Savoie of exhibit I-32 at page 92, by Turbide of exhibit I-33 at page 102, by the witness Barclay of exhibit I-34 at page 114, and by the witness Plamondon of exhibit I-36 at page 166, are all dismissed; the objection of 13 March at page 181 concerning a portion of Plamondon's testimony concerning the social assistant allowances is maintained; the objection at page 3 of the testimony of Poitras on 14 March concerning the production of exhibit I-37 is dismissed; the objection at page 59 of Pilote's testimony on 14 March concerning the proportion of country food is dismissed; the objection at page 77 to the production of exhibit I-40 by the same witness is maintained; the objection of March 15 at page 39 concerning a portion of the testimony of Landry on 15 March is dismissed; the objection of 15 March at page 86 of the testimony of Beaudet to the effect that a trapper needs a permit is dismissed and the objection to the production of the said permit I-46 at page 102 is dismissed; the objection of 19 March at page 12 of Vigneault's testimony is dismissed; the objection of 19 March at page 61 concerning the production of exhibit I-53 by Renaud is dismissed; the objection of 20 March at page 58 concerning that part of Patry's testimony concerning the dismantlement of camps is maintained; the permit mentioned by Amyot on 21 March at page 15 was subsequently filed as an exhibit and consequently the objection is no longer valid; the 3 objections which are found at pages 20, 23 and 157 of Amyot's testimony of 21 March concerning the spillway are all dismissed; the objection of 2 April page 17 to a portion of the testimony of Chadwick is dismissed; the objection concerning the pertinence of exhibits I-108, I-110, I-111, I-112, I-113 and I-114 is dismissed.

The objection of 3 April at page 7 of Lamontagne's testimony is dismissed; the objection of 4 April at page 158 of Perrier's testimony is maintained as not being pertinent; the objection concerning the migratory routes of caribou mentioned by Moisan

on April 9th is dismissed; the objection concerning a portion of Jurdant's testimony rendered April 11th concerning the cost of the study project is dismissed; the objection of 12 April taken under reserve at page 84 of Bertrand's testimony concerning a book by William Ashley Anderson is maintained; the 3 objections concerning different portions of Bertrand's testimony given 12 April page 104, 16 April page 71 and 16 April page 76 are all maintained; the objection of 16 April concerning Mansfield's testimony about seals and the Aswan dam is dismissed; the 3 objections raised 17 April concerning parts of the testimony of Marsolais at pages 5, 14 and 23 are all dismissed; the objection to the effect that documents I-163, I-164, and I-166 are not pertinent is dismissed; the objection raised 24 April at page 8 of the testimony of Cayer concerning the production of exhibit I-167 is dismissed; the objection concerning the answer given by the same witness at page 26 is maintained; the objection at page 59 to a portion of the testimony of the said witness is dismissed.

The objection at page 19 to a portion of the evidence of John Spence, who testified on 17 May during the presentation of the counter proof, is maintained.

e) the remaining objections

The other objections raised during the presentation of the material on balance of convenience will be discussed later.

PART 11

WHAT RIGHTS, IF ANY, DO THE CREE INDIANS AND INUIT POPULATION POSSESS?

Petitioners allege that they have a real right in the land, an interest that includes a usufructuary or possessory title. They do not dispute the sovereignty of the Federal Parliament and admit that their rights cannot be alienated except to the Crown. However they allege that the Province of Quebec cannot develop these lands until a surrender of the Indian rights has been obtained.

In order to determine the nature and extent of the Indian title, the Court will examine the legislation by virtue of which the Province of Quebec assumed a certain obligation towards the Indians, the historical events prior and subsequent to Confederation, the treaties entered into with the Indians, and the jurisprudence.

Before proceeding to consider the Indian title as it relates to the lands subject to dispute, one should keep in mind that indigenous people both on this continent and in different regions of the world treat title to land in a manner different from our own.

In discussing native title to land, Lord Haldane cautionned against examining such title in terms which are appropriate only to systems which have grown up under English Law. At p. 402 in Amodu Tijani -vs- Secretary Southern Nigeria (1921) 2 A.C. 399 he said at p. 402:

> "Their Lordships make the preliminary observation that in interpreting the native title to land, not only in Southern Nigeria, but other parts of the British Empire, much caution is essential. There is a tendency, operating at times unconsciously, to render that title conceptually in terms which are appropriate only to systems which have grown up under English law. But this tendency has to be held in check closely. As a rule, in the various systems of native jurisprudence throughout the Empire, there is no such full division between property and possession as English lawyers are familiar with. A very usual form of native title is that of a usufructuary right, which is a mere qualification of or burden on the radical or final title of the Sovereign where that exists. In such

> cases the title of the Sovereign is a pure legal estate, to which beneficial rights may or may not be attached."

Lord Haldane then refers to other illustrations such as the Indian title to lands in Canada, a life estate in Scotland which imports no freehold title but is simply in contemplation of Scotish Law a burden on a right of full property that cannot be split up, and a similar principle in India.

In Re Southern Rhodesia, (1919) A.C. 211, Lord Sumner in speaking of aboriginal rights expressed himself as follows at p. 234:

> "On the other hand, there are indigenous peoples whose legal conceptions, though differently developed, are hardly less precise than our own. When once they have been studied and understood they are no less enforceable than rights arising under English law."

1. <u>The law of 1912 and the obligation assumed by the Province of Quebec</u>.

The boundaries of the Province of Quebec, as they existed at the time of Confederation, were extended on two occasions. By an Act respecting the North-Western, Northern and North-Eastern boundaries of the Province of Quebec, 61 Victoria ch. 3 (assented to by the Imperial Parliament 13 June 1898) the boundaries of the Province of Quebec were extended to include the lower southern part of the area contemplated by Bill-50 (supra). The boundaries were again extended by the adoption by the Parliament of Canada on 1 April 1912 of the Quebec Boundaries Extension Act 2 George V ch. 45, when the limits of the Province of Quebec were again increased to form the Province of Quebec as we know it today. In the Act of 1912 the extension of the Province was made subject to, inter alia, the condition contained in section 2 (c):

> "That the Province of Quebec will recognize the rights of the Indian inhabitants in the territory above described to the same extent, and will obtain surrenders of such rights in the same manner, as the Government of Canada has heretofore recognized such rights and has obtained surrender thereof, and the said Province shall bear and satisfy all charges and expenditure in connection with or arising out of such surrenders".

Section 2 (d) stipulates that no such surrender shall be made or obtained except with the approval of the Governor-in-Council.

The Province of Quebec by the Act respecting the extension of the Province of Quebec by the annexation of Ungava 2 George V ch. 7 (assented to 3 April 1912) agreed to the extension of its territory on the terms and conditions and subject to the provisions set forth in the Quebec Boundaries Extension Act 1912.

It is interesting to note that whilst negotiations were being carried out between the Federal and the Provincial Government for the transfer of the said territory, the Canadian Government by an Order in Council No. 2626 dated January 17th 1910 made its position clear by including therein a provision that, in order to perfect its title to the territory in question, the Province of Quebec should adopt the established practice and agree with the Dominion upon the terms and conditions of a Treaty with the Indians for the formal cession of their title in the lands. Furtheron the same Order in Council states that it is not proposed to immediately extinguish the Indian title throughout the territory but to proceed gradually as may be dictated by the needs of the Indians or by the progress of settlement, and the Order in Council ends with the recommendation that the Province be advised of the need that exists for definite pre-arrangement as regards the Indian title before the extension of boundaries and that the cession by the Indians should be made by formal treaties upon the terms and conditions mentioned in the said Order in Council. In a subsequent Order in Council No. 801 dated 2 May 1910 dealing with the same question, the Canadian Minister observed that in the communication from Quebec no opposition is offered to the proposal that a treaty should be made with the Indians but the terms laid down are not accepted and demur is made that a preliminary treaty is not absolutely necessary. The Order in Council then refers to other remarks made by the Province of Quebec, but concludes that the terms to be offered the Indians "for a relinquishment of their rights and title to the territory described, as well as to any other parts of the Dominion, should be as set forth

in the Order in Council of the 17th January, 1910;" and "that the agreement between the Dominion and the Provinces should be statutory, incorporated in the Act respecting the extension of the boundries."

This legislation clearly shows that the Province of Quebec agreed to recognize the rights of the Indian inhabitants in the territory described in the said Act to the same extent and also agreed to obtain surrender of such rights in the same manner that the Government of Canada had prior thereto recognized such rights and obtained surrender thereof. This obligation is a clear and a precise one. It remains for this Court to decide what those rights were and in what manner the Government of Canada obtained surrender thereof.

2. Pre-Confederation.

When Charles 11 of England granted the Governor and Company of Adventurers Trading into Hudson's Bay and their successors the sole trade and commerce in the territories therein described Indians were living in and occupying most if not all the lands which presently form part of Canada. Both the French and the English authorities were concerned about the original inhabitants of this country. It was their desire to recognize the right of Indians to hunt and fish on all unoccupied lands. They did not wish to disturb this right except in areas where land for the settlement of the white inhabitants was necessary and, in such cases, treaties were entered into by which the Indians gave up all or part of the rights which they had in these lands. It was the policy of the Imperial Crown to enter into agreements with the Indians when it required land for settlement by the white colonists. The Hudson's Bay Company gave effect to this policy by entering into such agreements with the Indians. (Davey J., Regina -vs- White and Bob (1965) 52 W.W.R. 193; 50 D.L.R. 612.)

The history of the origin of the Indian title is treated with great detail by Hall J. in the Calder Case (infra) and by Norris J. in R. -vs- Wesley (infra), and therefore it is unnecessary for me to repeat at length what was said therein. It will be sufficient to simply deal briefly with a few of the events in this period.

Through instructions which it issued as early as the 17th Century, the Crown instructed its Governors not to molest or disturb the Indians in the possession of the lands which they occupy, and recognized their right to trap, hunt and fish therein. For example the instructions to Governor Murray dated 7 December 1763 (Constitutional documents, Canadian Archives p. 200) includes the following statement relating to Indians in the Province of Quebec:

> "And you are upon no account to molest or disturb them in the possession of such parts of the said province as they at present occupy or possess...."

Following the Treaty of Paris, the British Crown issued the Royal Proclamation of 1763, R.S.C. 1970 appendices p. 123. After establishing 4 distinct and separate governments to govern the territories secured under the Treaty of Paris including that of Quebec, the Proclamation goes on to say (p. 127) that the Indians "should not be molested or disturbed in the Possession of such Parts of Our Dominions and Territories as, not having been ceded to or purchased by Us, are reserved to them, or any of them, as their Hunting Grounds". In the following paragraph the Proclamation reserves for the use of the Indians all the lands and territories not included within the limits of the New Governments or within the limits of the territory granted to the Hudson's Bay Company.

In the case of White and Bob (supra) Norris J. said that the Royal Proclamation of 1763 was declaratory and confirmatory of the aboriginal rights of native inhabitants in this country. The decision in that case was approved by the Supreme Court of Canada in 52 D.L.R. (2) 481. Furthermore Hall J. in the Calder Case approved this statement.

Agreements and treaties entered into with Indians in the 17th Century for the purchase of land are referred to in exhibit P-77. Two other agreements are referred to in exhibit P-78. One was entered into on 31 May 1819 between John Ferguson of Upper Canada acting on behalf of His Majesty of the one part and the principal men of the Mississagua nation of Indians of the other part by virtue of which the latter surrendered and conveyed to His Majesty certain territory for the consideration stated therein. The second agreement,

entered into on 28 November 1822 between the same Indians, a representative of the Superintendent General of Indian Affairs in the province of Upper Canada, and the Crown, provided for the payment of annuities to the Indians for the transfer of certain properties. A reference to the purchase in 1783 by Captain Crawford of certain lands located in Ontario from the Indians for the purpose of settlement is contained in exhibit P-79.

It is clear therefore that prior to Confederation, the right of Indians to hunt and fish on unoccupied Crown lands had always been recognized in Canada. (R. -vs- Sikyea infra). We will see later that the recognition of the Indian title to the land continued up to the present day.

3. Post Confederation period.

The manner in which the Government of Canada recognized the Indian title to the land will become apparent as soon as we consider the legislation referred to in this section.

Immediately following Confederation the Imperial Parliament decided to terminate the jurisdiction and rights of the Hudson Bay Company in that large tract of land which had been ceded to it by Charles 11. By a series of steps which we will now consider, this land became part of Canada.

Rupert's Land Act 1868 (U.K.), R.S.C. 1970 appendices p. 239 authorized Her Majesty by Order in Council to accept a surrender of the lands privileges and rights of the Hudson's Bay Company and to declare that Rupert's Land be admitted into and become part of Canada.

Section 146 of the British North America Act 1867 authorized Her Majesty by Order in Council to admit Rupert's land into the Union.

The Imperial Order in Council dated 23 June 1870, R.S.C. 1970 appendices p. 257 decreed that Rupert's land become part of Canada with effect from 15 July 1870. The admission of Rupert's land was made upon the terms and conditions therein mentioned including section 14 p. 262 which reads as follows:

> "Any claims of Indians to compensation for lands required for purposes of settlement shall be disposed of by the Canadian Government in communication with the Imperial Government; and the Company shall be relieved of all responsibility in respect of them".

The Order in Council last referred to contains as schedule (A) the Address to the Queen from the Senate and House of Commons of Canada, as schedule (B) the resolutions, and as schedule (C) the deed of surrender. The first Address dated December 18th 1867 requesting the Queen to extend Canada westward to the shores of the Pacific Ocean by uniting Rupert's Land and the Northwest territory to Canada contained the following provision (cf p. 264):

> "And furthermore, that, upon the transference of the territories in question to the Canadian Government, the claims of the Indian tribes to compensation for lands required for purposes of settlement will be considered and settled in conformity with the equitable principles which have uniformly governed the British Crown in its dealings with aborigines".

The resolution of both Houses contains the following (cf p. 268):

> "Resolved, - That upon the transference of the territories in question to the Canadian Government, it will be the duty of the Government to make adequate provision for the protection of the Indian tribes whose interests and well-being are involved in the transfer."

In the second Address dated May 1869, the Canadian Parliament undertook (cf p. 270):

> "That upon the transference of the territories in question to the Canadian Government it will be our duty to make adequate provision for the protection of the Indian tribes whose interests and well-being are involved in the transfer, and we authorize and empower the Governor in Council to arrange any details that may be necessary to carry out the terms and conditions of the above agreement."

Section 8 of the agreement between the Delegates of the Government and the Directors of the Hudson's Bay Company referred to at p. 270 and set out at p. 267 reads as follows:

> "It is understood that any claims of Indians to compensation for lands required for purposes of settlement shall be disposed of by the Canadian Government, in communication with the Imperial Government, and that the Company shall be relieved of all responsibility in respect of them."

Section 14 of the Deed of Surrender Schedule C, set out at p. 274 reads as follows:

> "Any claims of Indians to compensation for lands required for purposes of settlement shall be disposed of by the Canadian Government in communication with the Imperial Government; and the Company shall be relieved of all responsibility in respect of them."

The Indian title was recognized in other acts which I intend to briefly refer to.

Section 31 of the Manitoba Act, 1870, R.S.C. 1970 appendices p. 247, provided that the extinguishment of the Indian Title to the lands in the Province would be obtained by distributing a large portion of the ungranted lands (to the extent of 1,400,000 acres) to the Indians residing therein. The Dominion Lands Act 1872, 35 Victoria ch. 23 contained in section 42 a provision to the effect that none of the provisions of the Act shall be held to apply to territory the Indian Title to which shall not at the time have been extinguished. The Ontario Boundaries Extension Act Statutes of Canada 1912 ch. 40 contains provisions identical to section 2c & 2d of the Quebec Boundaries Extension Act (supra).

The Orders in Council, Resolutions, Addresses and Legislation referred to, all clearly show that the authorities therein mentioned recognized that the Indians had a right and title to the land. When the Imperial Crown transferred Rupert's Land to Canada, the Canadian Government undertook to settle the claims of Indian tribes to compensation for lands required for the purposes of settlement in conformity with equitable principles. In order to give effect to this undertaking, the Government of Canada entered into treaties with the Indians whenever it desired to obtain lands for purposes of settlement. When the Canadian Government decided to extend the boundaries of the Provinces of Quebec and Ontario to include additional portions of Rupert's Land it obliged the Provinces of Quebec and Ontario to assume similar obligations towards the Indians. Subsequent to the Law of 1905 the Ontario Government, when it desired to open up certain lands for settlement, entered into treaties with the Indians in accordance with its obligation under the said legislation (the James Bay Treaty and adhesions mentioned in the following section). The Province of Quebec has not yet entered into any treaties with the Indians.

4. Treaties entered into with the Indians.

William McKim, a representative of the Department of Indian Affairs, filed as exhibit 15, 14 treaties entered into between the Crown of the one part and certain tribes of Indians residing in different parts of Canada (west of the Province of Quebec) of the other part. In each of these treaties, the tribes of Indians therein mentioned agreed to cede, release, surrender and yield up to the Crown all the land included in the territories therein described for the consideration set out therein. In most of the treaties, the Crown recognized the right of the Indians to continue to pursue their avocations of hunting, trapping and fishing throughout the territory surrendered.

The following is the chronological order of the treaties filed as exhibit P-15, giving the date, the names of the Indian tribes and the territory concerned:

> The Robinson Treaty entered into 7 September 1850 with the Ojibewa Indians of Lake Superior.
>
> The Second Robinson Treaty dated 9 September 1850 with the Ojibewa Indians of Lake Huron.
>
> Treaties 1 and 2 entered into in the year 1871 with the Chippewa and Cree Indians of Manitoba and the Country adjacent thereto.
>
> Treaty No. 3 entered into in 1873 with the Saulteaux tribe of the Ojibbeway Indians at the Northwest Angle on the lake of the Woods.
>
> Treaty No. 4 entered into in 1874 with the Cree and Saulteaux tribes of Indians at Qu'Appelle and Fort Ellice.
>
> Treaty No. 5 entered into in 1875 with the Saulteaux and Swampy Cree tribes of Indians at Beren's River and Norway House (an area located near the Saskatchewan River and the Northwest territory with adhesions covering tribes of Indians in territory adjacent thereto).
>
> Treaty No. 6 entered into in 1876 with the Plain and Wood Cree Indians and Other Tribes of Indians of Fort Carlton, Fort Pitt and Battle River (an area located in the province of Manitoba and the Northwest territory with adhesions by other tribes of Indians).
>
> Treaty and Supplementary Treaty No. 7 entered into 22nd September and 4 December 1877 with the Blackfeet and other Indian Tribes at the Blackfoot Crossing of Bow River and Fort MacLeod (an area east of the Rocky Mountains).

Treaty No. 8 entered into 21 June 1899 with the Cree, Beaver, Chipewyan and other Indians with adhesions and reports attached thereto (covering an area located in Alberta and near the Great Slave Lake).

The James Bay Treaty No. 9 entered into in 1905 and 1906 with adhesions made in 1929 and 1930 entered into with the Ojibbeway, Cree and other Indians covering various areas located in the province of Ontario.

Treaty No. 10 and Reports of Commissioners entered into in 1906 with the Chipewyan, Cree and other Indians inhabiting territories situated partly in the province of Saskatchewan and partly in the province of Alberta.

Treaty No. 11 entered into in 1921 with adhesions and reports with the Slave, Dogrib, Loucheux, Hare and other Indians inhabiting lands in Yukon territory and the Northwest territories.

A Treaty made 31 October 1923 with the Chippewa Indians of Christian Island, Georgina Island and Rama covering lands located in the province of Ontario.

Treaty entered into 15 November 1923 with the Mississauga Indians of Rice Lake, Mud Lake, Scugog Lake and Alderville (all located in the province of Ontario).

It is interesting to note that the Treaties entered into with the Chippewa Indians on 31 October 1923 and with the Mississauga Indians on 15 November 1923 both include reference to the appointment of Commissioners by the Crown for the purpose of inquiring into the validity of the Indian claim to a title in the land consisting of the right to fish, hunt and trap over the land. The treaties state that the Commissioners made a determination in favor of the validity of the said rights.

Of the 14 treaties just mentioned, 2 were entered into before Confederation, 9 between Confederation and the Law of 1912, and the remaining 3 subsequent to the Law of 1912. It is clear therefore, that the Crown before Confederation, and the Canadian Government after Confederation treated all the Indians throughout Canada as having an interest in the land that required a treaty to effect its surrender.

An examination of the following provisions will help determine the nature of the Indian right, title and interest in the lands as viewed by the contracting parties:

a) in the Robinson Superior and the Robinson Huron Treaties, the Indians did cede, grant and convey to the Crown "all their right, title and interest in the whole of the territory.....". Included was the stipulation that the Indians are allowed to hunt over the territory ceded and to fish in the waters thereof as they were previously in the habit of doing.

b) in treaties 1 and 2, the Indians did "cede, release, surrender and yield" to the Crown the territory therein described but they did not reserve the right to continue to hunt and fish therein.

c) in treaties numbers 3,4,5,6,7,8,9,10 and 11 the Indians agreed to "cede, release, surrender and yield up to the Government of the Dominion of Canada for Her Majesty the Queen and her successors forever, all their rights, titles and privileges whatsoever to the lands" therein described. The Indians reserved their right to pursue their avocations of hunting and fishing throughout the tract surrendered.

d) in each of the treaties Nos. 1 to 11, mention is made that the treaty is entered into because the Crown wishes to open up the land for settlement, immigration, trade, travel, mining, lumbering and such other purpose as may seem meet and refers to the necessity of obtaining the consent of the Indians inhabiting the said territory.

e) it is only in the Chippewa Treaty of 31 October 1923 and the Mississauga Treaty of 15 November 1923 that the Indian title is defined in any respect. In the opening preamble of each treaty, reference is made to the Indian claim to certain interests in the land such interests being the Indian title to fishing, hunting and trapping.

I note that in the Robinson Superior and Robinson Huron treaties the Indians after ceding all their rights in the territory therein described reserved to themselves the right to hunt and fish. This reservation clearly shows that their rights exceeded hunting and fishing because if this was not so, why did the parties agree to such a provision. Treaties 1 and 2 constituted a transfer of ownership without any reservations whatsoever. In sub-paragraph

c above, the Indians transferred their rights, titles and privileges to the lands and once again reserved their rights to hunt and fish therein. There is no doubt, therefore, that the Government of Canada recognized that the Indians had certain rights and title to the land which were greater than simply the right to hunt and fish therein. In some treaties an absolute right of ownership appears to have been recognized whereas in all the others with the exception of the last two, the Government of Canada recognized their rights as being more than simply the right to hunt and fish. In order to open up the land for settlement or otherwise make use of the land, the Government of Canada recognized that it was necessary to obtain the consent of the Indians and this consent was obtained through treaties. How else can these treaties be interpreted? If the Indians had no title to the land, why were all these treaties with the various tribes concerning territory in various areas of the country entered into. It is quite clear that in order to extinguish the Indian right, title and interest in the land, the Canadian Government found it necessary to enter into treaties with the Indians and furthermore that their title to the land was at the very least a personal and usufructuary one including rights of hunting, fishing and trapping.

5. Jurisprudence.

An examination of the jurisprudence will also help in determining the nature and extent of the Indian title to lands in this country and the manner in which the Canadian Government obtained surrender thereof.

However in examining the following jurisprudence it must continually be kept in mind that this particular case differs from all the others on a very important point. In this case there is a statutory condition present, namely, the obligation assumed by the Province of Quebec in the legislation of 1912, which does not exist in any of the other cases decided by the Courts prior to this day. Notwithstanding this difference the jurisprudence is helpful in determining in what manner and to what extent the Indian title exists in Canada.

The first Canadian decision dealing with the Indian title is St. Catherine's Milling and Lumber Company -vs- the Queen (1886) 13 S.C.R. 577;.

Ritchie C.J. at p. 599 expressed himself as follows:

> "I am of opinion, that all ungranted lands in the province of Ontario belong to the crown as part of the public domain, subject to the Indian right of occupancy in cases in which the same has not been lawfully extinguished, and when such right of occupancy has been lawfully extinguished absolutely to the crown, and as a consequence to the province of Ontario. I think the crown owns the soil of all the unpatented lands, the Indians possessing only the right of occupancy, and the crown possessing the legal title subject to that occupancy, with the absolute exclusive right to extinguish the Indian title either by conquest or by purchase;..."

Strong J. who dissented on other grounds was in agreement with the majority on the matter of the Indian title and at p. 608 when speaking of the policy followed with respect to the Indians said:

> "It may be summarily stated as consisting in the recognition by the crown of a usufructuary title in the Indians to all unsurrendered lands. This title, though not perhaps susceptible of any accurate legal definition in exact legal terms, was one which nevertheless sufficed to protect the Indians in the absolute use and enjoyment of their lands, whilst at the same time they were incapacitated from making any valid alienation otherwise than to the crown itself, in whom the ultimate title was, in accordance with the English law of real property, considered as vested."

At page 615 he continues as follows:

> "To summarize these arguments, which appear to me to possess great force, we find, that at the date of confederation the Indians, by the constant usage and practice of the crown, were considered to possess a certain proprietary interest in the unsurrendered lands which they occupied as hunting grounds; that this usage had either ripened into a rule of the common law as applicable to the American Colonies, or that such a rule had been derived from the law of nations and had in this way been imported into the Colonial law as applied to Indian Nations; that such property of the Indians was usufructuary only and could not be alienated, except by surrender to the crown as the ultimate owner of the soil;..."

The decision of the Supreme Court was affirmed by the Privy Council in (1889) 14 A.C. 46. The judgment of the Court was delivered by Lord Watson who at p. 55 said:

> "It was suggested in the course of the argument for the Dominion, that inasmuch as the proclamation recites that the territories thereby reserved for Indians had never "been ceded to or purchased by" the Crown, the entire property of the land remained with them. That inference is, however, at variance with the terms of the instrument, which shew that the tenure of the Indians was a personal and usufructuary right, dependent upon the good will of the Sovereign. The lands reserved are expressly stated to be "parts of Our dominions and territories;" and it is declared to be the will and pleasure of the sovereign that,"for the present," they shall be reserved for the use of the Indians, as their hunting grounds, under his protection and dominion. There was a great deal of learned discussion at the Bar with respect to the precise quality of the Indian right, but their Lordships do not consider it necessary to express any opinion upon the point. It appears to them to be sufficient for the purposes of this case that there has been all along vested in the Crown a substantial and paramount estate, underlying the Indian title, which became a plenum dominium whenever that title was surrendered or otherwise extinguished."

In the case of Rex v. Wesley 1932 4 D.L.R. 774, the Alberta Supreme Court (Appellate Division), dealt with the right of a Stoney Indian to hunt on unoccupied Crown land. Lunney J. at page 778 says:

> "The treaties with the Indians and the subsequent legislation treat with the rights of Indians to hunt, and until definite legislation is passed by a competent body, the Indian is, in my opinion, entitled to hunt on "all unoccupied Crown lands and on any other lands" to which he may have a right of access."

At p. 786 McGillivray J., with whom the other two judges of the Court of Appeal agreed, in referring to the Royal Proclamation said that the land with which the Court was concerned was part of the territory granted to Hudson's Bay Company in 1670 and consequently there was no material before the Court on which the Court could base a judicial opinion as to the position of the Indians inhabiting that great section of country granted to the Hudson's Bay Company. However, he did refer to the Order in Council of June 23rd 1870 admitting Rupert's Land and the Northwest territory into the Union citing paragraph 14 (supra) and the address to Her Majesty from the Senate and the House of Commons (Schedule A to the Order in Council mentioned above) and the Resolution which follows as schedule B, all of which deal with the claims of Indians to compensation for

lands required for the purposes of settlement. These documents are set out at length in the beginning of this Part. After dealing with these matters he goes on at page 787 to conclude as follows:

> "Whatever the rights of the Stoney and other Indians were under the Hudson's Bay regime, it is clear that at the time of the making of the Treaty to which I shall next allude, the Indian inhabitants of these Western plains were deemed to have or at least treated by the Crown as having rights, titles and privileges of the same kind and character as those enjoyed by those Indians whose rights were considered in the St. Catherine's Milling case because it is a matter of common knowledge that the Dominion has made treaties with all of the Indian tribes of the North West within the fertile belt in each of which they have given recognition to and provided for the surrender and extinguishment of the Indian title."

> "The Treaty made with the once powerful nation of the Assiniboines or Stonies on September 22, 1877, reads in part as follows:-....."

And at page 788:

> "Assuming as I do that our treaties with Indians are on no higher plane than other formal agreements yet this in no wise makes it less the duty and obligation of the Crown to carry out the promises contained in those treaties with the exactness which honour and good conscience dictate and it is not to be thought that the Crown has departed from those equitable principles which the Senate and the House of Commons declared in addressing Her Majesty in 1867, uniformly governed the British Crown in its dealings with the aborigines."

The next case to consider is R. vs. SIKYEA 1964 43 D.L.R. (2d) 150, a judgment of the Northwest Territories Court of Appeal. Johnson J. delivering the judgment of the Court said at p. 152:

> "The right of Indians to hunt and fish for food on unoccupied Crown lands has always been recognized in Canada- in the early days as an incident of their "ownership" of the land, and later by the treaties by which the Indians gave up their ownership right in these lands. McGillivray, J.A. in R. v. Wesley, 1932 4 D.L.R. 774, 58 C.C.C. 269, 26 A.L.R. 433, 1932 2 W.W.R. 337, discussed quite fully the origin, history and nature of the right of the Indians both in the lands and under the treaties by which these were surrendered and it is unnecessary to repeat what he has said. It is sufficient to say that these rights had their origin in the Royal Proclamation, R.S.C. 1952, vol. 6, App. 111, p 6127, that followed the Treaty of Paris in 1763. By that Proclamation it was declared that the Indians "should not be molested or disturbed in the Possession of such Parts of Our Dominions and Territories as, not having been ceded to or purchased by Us, are reserved to them or any of them, as their Hunting Grounds". The In-

> dians inhabiting Hudson Bay Company lands were excluded from the benefit of the Proclamation, and it is doubtful, to say the least, if the Indians of at least the western part of the Northwest Territories could claim any rights under the Proclamation, for these lands at the time were terra incognita and lay to the north and not "to the westward of the Sources of the Rivers which fall into the Sea from the West and North West" (from the 1763 Proclamation describing the area to which the Proclamation applied). That fact is not important because the Government of Canada has treated all Indians across Canada, including those living on lands claimed by the Hudson Bay Company, as having an interest in the lands that required a treaty to effect its surrender." (Emphasis added).

This latter judgment was affirmed by the Supreme Court of Canada in Sikyea vs. the Queen 1964 S.C.R. 642. Hall J. who delivered the judgment of the Court made the following statement at page 646:

> "On the substantive question involved, I agree with the reasons for judgment and with the conclusions of Johnson J.A. in the Court of Appeal. He has dealt with the important issues fully and correctly in their historical and legal settings, and there is nothing which I can usefully add to what he has written."

In the case of Sigeareak -vs- the Queen 1966 S.C.R. 645 Hall J. expressed the opinion that the Royal Proclamation of 1763 is not applicable to lands granted to the Hudson's Bay Company. In delivering the judgment of the Court he said at p. 649:

> "It was contended by the appellant that the Royal Proclamation of 1763 applied to Indians and Eskimos in the area in question here and was still in effect notwithstanding the Northwest Territories Act and the Game Ordinance. Sissons J. so held in Kogogolak and in Kallooar. Johnson J.A. in Regina v. Sikyea, whose judgment was adopted in this Court, expressed himself to the contrary. There is no need for any doubt on the point."

At p. 650 he continued as follows:

> "The Proclamation specifically excludes territory granted to the Hudson's Bay Company and there can be no question that the region in question was within the area granted to Hudson's Bay Company. Accordingly the Proclamation does not and never did apply in the region in question and the judgments to the contrary are not good law."

The case of Frank Calder et al. vs. the Attorney General of British Columbia is the last decision rendered by the Supreme Court of Canada on Indian title. The judgment was pronounced January 31 1973. Of the seven Judges who heard the appeal, three

held that the Nishga tribe of Indians in British Columbia had a right to possess the lands therein described and the right to enjoy the fruits of the soil of the forest and of the rivers and streams within the boundaries of the said lands and that their rights thereto had not been extinguished, three decided that they had no such rights and therefore were not entitled to a declaratory judgment stating that their rights had never been extinguished, and the 7th Judge did not pronounce himself on the merits of the case but simply stated that for a proceedural reason the action had to fail. Consequently this decision is not decisive on the issues raised in the judgment. Judson whose opinion was concurred in by Martland J. and Ritchie J. held that the Royal Proclamation has no bearing on the Indian title in British Columbia because the Royal Proclamation does not apply to that province; that the Privy Council in the St. Catherine's Milling case found that the Royal Proclamation of 1763 was the origin of the Indian title; and that the sovereign authority elected to exercise complete dominion over the lands in question, adverse to any right of occupancy which the Nishga tribe might have had, when, by legislation, it opened up such lands for settlement, subject to the reserves of lands set aside for Indian occupation. The last mentioned statement of Judson J. does not say that the Nishga tribe never had any title to the land, but simply that whatever title it did have was extinguished when the Government decided to exercise complete Dominion over the lands in question.

Hall J. with whom Spence J. and Laskin J. concurred held that unlike the method used to make out title in other contexts, proof of the Indian title or interest is to be made out as a matter of fact (p. 10); that possession is of itself at common law proof of ownership and that unchallenged possession is admitted in the case be[illegible]re him (p. 21); that treaties were made with the Indians of the Canadian West covering enormous tracts of land and that these treaties were a recognition of Indian title (p. 37); that in all areas where Indian lands were being taken by the Crown treaties were negotiated and entered into between the Crown and the Indian tribe on land then in occupation; that the Indian right was a "usufructuary

right only and a personal right in the sense that it is in its nature inalienable except by surrender to the Crown", according to the decision of the Privy Council in Attorney General for Quebec vs. Attorney General for Canada (1921) A.C. 401; that the aboriginal Indian title does not depend on treaty, executive order or legislative enactment (p. 39); that Canadian treaties, made with much solemnity on behalf of the Crown, were intended to extinguish the Indian title and had no other purpose (p. 42); that once aboriginal title is established, it is presumed to continue until the contrary is proved and he refers to the opinion of Viscount Haldane in Amodu Tijani -v- Secretary Southern Nigeria (1921) 2 A.C. 399 at pages 409-410; that Nishga people were entitled to assert as a legal right their Indian title which could not thereafter be extinguished except by surrender to the Crown or by competent legislative Authority and then only by specific legislation (p. 50); and he concluded that the right of the Nishga tribe to possession of the lands referred to and their right to enjoy the fruits of the soil of the forest and of the rivers and streams within the boundaries of the said lands have not been extinguished by the Province of British Columbia or its predecessors.

The Calder case is distinguishable from the present case. The Supreme Court was not dealing with any statutory provision which could benefit the Indians. I refer to the statutory provision contained in the Law of 1912 by virtue of which the Province of Quebec undertook to recognize the rights of the Indian inhabitants to the same extent and obtain surrenders of such rights in the same manner as the Government of Canada had previously recognized such rights and obtained surrender thereof. Secondly I refer to the statement of Judson J. who stated that the Sovereign authority in the Calder case elected to exercise complete Dominion over the lands in question. In the present case the Sovereign authority has never elected to exercise such complete Dominion over the lands in question. On the contrary it decided to recognize the rights of the Indians in the manner stated above.

6. Conclusions respecting the nature and extent of the Indian title in the present case.

Since the application presently before me is for an interlocutory order of injunction, it is unnecessary to define the exact nature and extent of the Indian title to the land. Suffice it to say that the material examined in this part clearly shows that at the very least the Cree Indians and Eskimo have been exercising personal and usufructuary rights over the territory and the lands adjacent thereto. They have been in possession and occupation of these lands and exercising fishing, hunting and trapping rights therein since time immemorial. It has been shown that the Government of Canada entered into treaties with Indians whenever it desired to obtain lands for the purposes of settlement or otherwise. In view of the obligation assumed by the Province of Quebec in the Legislation of 1912 it appears that the Province of Quebec cannot develop or otherwise open up these lands for settlement without acting in the same manner that is, without the prior agreement of the Indians and Eskimo.

The argument put forward to the effect that the territory forms part of the original tract of land granted to the Hudson's Bay Company and consequently is not subject to the Royal Proclamation does not have any importance in the present case for two reasons. First I refer to the opinion of Johnson J. in R. vs. Sikyea (supra) who said "that fact is not important because the Government of Canada has treated all Indians across Canada, including those living on lands claimed by the Hudson's Bay Company, as having an interest in the lands that required a treaty to effect its surrender". This decision it will be remembered was confirmed by the Supreme Court of Canada. Secondly I again refer to the statutory obligation assumed by the Province of Quebec in the Law of 1912.

The evidence also shows that the rights of the Cree Indian and Inuit population have never been extinguished. McKim representing the Department of Indian Affairs stated that there are no treaties covering the cession of land by Indians in the Province of Quebec. McKim spoke of Treaty No. 9 negotiated between the In-

dians, the Federal Government and the Province of Ontario concerning the Dominion Abitibi Band Indians who are recipients of benefits. The Indians covered by Treaty No. 9 live in Ontario but cross the border into Quebec. Order in Council P.C. 1593 dated 22 July 1908, exhibit P-22/45 refers to the difficulty which was experienced with the Abitibi Indians who were occupying a portion of Ontario and a portion of Quebec. The treaty was made applicable to the Indians occupying a portion of the Province of Quebec and an agreement, exhibit P-46, giving effect thereto was entered into between the interested parties. Fairholm, another representative of the Department of Indian Affairs, confirmed that there are no treaties signed by Indians ceding any land. Professor Sanders states that he has not seen any document by virtue of which Indians extinguished any of their rights in the territory outlined in red on exhibit P-3. Vergette, chief of the land division, Department of Indian Affairs, stated that the department does not have any document relating to the extinction of any rights which the Indians in the Province of Quebec may have. There is also a reference in Order in Council P.C. 1569 dated 1 August 1907, exhibit P-22/42 to the effect that no treaty has ever been made with the Indians of the Province of Quebec for the surrender to the Crown of land comprised in that Province.

Order in Council P.C. 1569 dated 1 August 1907 and approved on the same day exhibit P-22/42 states: "That no treaty has ever been made with the Indians of the Province of Quebec (formally lower Canada) for the surrender to the Crown of the land comprised in that province; but small portions of Indian reserves have within recent years, been surrendered to the Crown by different Bands in that province for the purpose of disposition for their benefit."

PART III

THEIR DEPENDENCE ON THE LAND

1. Description of the territory in detail.

A short description of the area as described by the witnesses will help in understanding the testimony of the inhabitants of the area and other witnesses who testified on behalf of both parties. Professor HARE, director general of Research Coordination in the Federal Department of the Environment, filed a map, exhibit P-18, to show that the region is divided in 4 distinct areas. The area north of the 59th ° is tundra; that between the 55th and 59th is forest tundra which is a land mainly treeless, that is, it is mostly tundra but there are groves of trees mostly on low ground; from the 55th south to the 52nd ° is the third zone called woodland area which is an open kind of forest like a park, trees scattered in the landscape with carpets of other vegetation in between; the fourth zone below the 52nd ° is true forest area with the area between the 49th and 52nd ° being very mossy with extensive muskeg from the James Bay coast up to 50 miles inland. As one goes eastward the ground rises continually and forested landscapes become dominant. In the muskeg area the peat is several feet thick with partially flooded areas containing some deformed black spruce. East of Mistassini one meets rolling hills with rocks near the surface, the whole landscape being covered with forest.

ANDRE LANGLOIS, an engineer with experience in the construction of dams, describes the territory as being between the 49th and 55th ° of latitude adding that the south part of the territory is approximately 400 miles from Montreal. He gives a resume of the human, forest, mining, game, fish, hydroelectric and tourist resources in the territory. He gives the population of the various towns and villages and speaks of Government Services available therein.

Professor GILL, who teaches subjects pertaining to northern ecology, describes the Sub-Arctic as that broad circumpolar belt which goes entirely around the northern part of the northern hemisphere south of the treeless zone. The major part of central

and northern Quebec is in the Sub-Arctic area characterized by a severe climate subject to great temperature fluctuations during the winter and summer. The number of animal species are very few compared to the rest of the globe. Both the number and the types of vegetation are limited and regeneration of vegetation is normally slow. It is an environment characterized by stress, especially climatic stress. The Sub-Arctic is depauperated in terms of the very few species of plants and animals.

Mr. AMYOT, a construction engineer with experience in erection of dams, filed a series of photographs I-55 to I-73 to describe the areas which he visited. The Rupert River, the Great Whale River, the La Grande River, and the Eastmain River contain some very important rapids. The photos also show other rivers in the area. The Caniapiscau flows for 200 to 300 miles through narrow gorges, and the mountain in this area is very bare. In the area above La Grande River, there are a great number of lakes such as Lake Delorme, Lake Caniapiscau, Lake Bienville and many other smaller lakes. The area in this region is almost flat and the La Grande River flows towards the sea gradually.

The evidence reveals that the area in which the Indian and Inuit population live is quite large. It is divided into territories in which particular bands live and each territory is divided into trapping areas called trap lines. A trap line is headed by a tallyman who is a trapper responsible for the upkeep of the trap line. Chief Diamond explains that trap lines are for beavers only. Only a tallyman and persons authorized by him may trap beaver in any particular trap line. Indians can, however, fish or hunt game in any trap line. According to Chief Diamond, the trappers who make use of their trap lines go there in the fall or early winter and remain at the trap line until late winter or spring when they return to the settlement to hunt goose and fish. In the months of July and August they mainly fish and in the fall they again hunt goose. A trapper uses the different areas within a trap line on a rotation basis so that whenever possible the trapper will not trap in the same particular area 2 years in a row. This system gives the beaver sufficient time to multiply and grow.

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2. Do the Indians and Inuits live totally or partially by hunting, fishing and trapping.

The parties filed an admission on January 15th by virtue of which it was admitted that the Cree Indians and Inuits living in the territory covered by Bill-50 and at Great Whale Post, and the Inuits living at Fort Chimo, as well as their ancestors, hunted and fished and have hunted and fished since at least 1850 in the regions mentioned and in the immediate vicinity thereof. The said admission of January 15th also contained reference to the fact that Cree Indians and Inuits use at least a portion of the animals which they hunt and fish for at least a part of their subsistance. All the admissions filed in the present case, were made subject to the rights of the parties to produce further proof in respect thereof.

The testimony of the Indian and Inuit witnesses reveals that:

1.- they, their fathers and in some instancies grandfathers trapped, hunted and fished in most of northern Quebec. As an example John Kawapit learned to trap, hunt and fish from his father who died 55 years ago at the age of 60. John Kawapit is now 69;

2.- the diet of the Indian and Inuit population consists mostly of food which they trap, hunt and fish, which they refer to in their testimony as country food. The proportion of country food consumed by them in relation to food purchased from the store varies according to different witnesses from a slight majority to as high as 90%. I will return to this subject later when discussing testimony given by witnesses produced by respondents;

3.- the Indian and Inuit population eat all the animals that they trap and hunt and all the fish which they obtain from the rivers and lakes. The variety is great. They refer to caribou, moose, bear, marten, beaver, rabbit, fox, squirrel, ptarmigan, lynx, loon and otter. From the sea they obtain seal and whale in small quantities, and a great variety of fish such as trout, salmon, white-fish, arctic char, wall-eye, pike and sturgeon. They also hunt many birds mainly geese;

4.- many heads of family are full time hunters and trappers, others are part time hunters and trappers, and most if not

all of the remaining members of each band hunt and trap around the settlement on a part time basis. For example Chief Diamond stated that 68 out of 120 families of the Rupert House Band are full time hunters and trappers. Watt, president of the Community Council of Fort Chimo stated that there are 60 full time hunters whilst the remainder hunt part time. Chief Shanush of the Eastmain Band stated that 40 male members of the band, of whom 15 are tallymen, hunt, fish and trap. Chief Petawabano, chief of the Mistassini Band testified that 150 families trap every year, 50 to 60 trap around the settlement on a regular basis and the remainder trap on a part time basis. He also stated that 75% of the Band territory has been used in the last 5 years;

5.- they fish in many of the rivers and lakes amongst which are the following rivers namely, Nottaway, Rupert, Broadback, Eastmain, Opinaca, Kanaaupscow, La Grande, Great Whale River, Caniapiscau, Koksoak, Tunulik and False, and the following lakes Sakami, Opinaca, Bienville, Caniapiscau, Delorme, Nachikapau and Diana. With respect to La Grande River, particular mention was made of fishing at the first rapids and between the first and the second rapids which are areas where they obtain a great quantity of fish;

6.- the rivers are used as highways thereby permitting them to go to their trap line and elsewhere with facility during summer and winter;

7.- many of them work for salary;

8.- many of their dead are buried along the rivers, close to lakes and in their trap lines;

9.- their religion revolves around the game animals and the killing of all animals has a strong religious significance to them;

10.- they are happy with their own way of life and are violently opposed to the hydroelectric project.

HARVEY FEIT, anthropologist, in carrying out reseach on the hunting and trapping habits of the Waswanipi Indians visited the Waswanipi area, the towns of Matagami , Miquelon, Desmarais Ville and the Waswanipi River. Heads of families leave in October for their trap lines and remain there until the latter part of May.

52.6% of the men follow this pattern and visit the settlement once at Christmas and once at Easter, 17.3% do this part time, and 8.7% reside in the settlement during the entire winter but go out on short excursions around the settlement to hunt and trap. In summer one half of the 52.6% mentioned take jobs and the remainder stay at home. During the summer 8.7% of the heads of families had full time jobs and 66% part time jobs. They also fish, hunt and trap part time. Nearly 100% of the heads of families in summer hunt and trap for food, killing all kinds of animals and fish. Witness took a sample of 8 families in the bush. 82% of the food eaten was caught in the bush and the balance was food which they had purchased. 5 were residents of Matagami and 3 from an area near Miquelon. Their annual income is divided as follows: 10% from fur, 52.1% credited for food which they caught, 9.6% transferred from old age pension and family allowance, 8.1% welfare and 20.2% wages earned. Many of the furs from the animals they hunt and trap is used by them for their own personal needs. The areas within a particular trap line are used on a rotational basis. They prefer to hunt two or more together for safety reasons. They may cross other trap lines and kill animals and hunt and fish in such trap lines but they cannot trap beaver in a trap line other than their own. Bands usually occupy defined territory. Since 1964, 50% of the men have been full time hunters and trappers. In cross-examination he says that 45% of the young people born between 1940 and 1949 are full time hunters and trappers, 20% are part time hunters and trappers, and 34% did not hunt and trap during the 2 seasons during which he carried out his study, but 88% of this latter number had some experience as hunters and trappers. Among young people there is no major swing away from hunting and trapping.

Neeposh a member of the Mistassini Band is a full time hunter and trapper, feeds 5 people and has his own trap line which he has used every year for the last 5 years; William Gull a member of the Waswanipi Band has his own trap line which he has used every year and he feeds 3 people; Flemming of Great Whale Post says that many live from hunting and trapping but most work for wages but their food is 70% country food and 30% store food; Loon of Mistassini

hunts and traps on his father's trap line, and last year spent 8 months on his trap line with 3 other families; Ottereyes of Waswanipi hunts and traps full time and says that over ½ of the members of the Band hunt and trap and live off the land; John Mark of Paint Hills says there are 40 full time hunters and trappers in the Band and the remainder hunt and trap part time; Jimiken a member of the Nemiska Band hunted and trapped from November 1972 to January 3rd 1973 and says that 90% of the members of the Band hunt and trap and spend up to 8 months on their trap lines; John Kawapit hunts and traps and says that all males hunt and trap around the settlement and about 10 away from the settlement; David Sandy stated that at the time that he was testifying 20 families were trapping away from the settlement and the remainder around the settlement; Samuel Blueboy uses his trap line every year and says that almost all the members of Rupert House hunt, fish and trap around the settlement; Shashaweskum of Paint Hills uses his trap line every year for a period of 2 to 6 months and he and all members of the Band hunt and fish around the settlement when not on their trap lines; Chief Kanatewat of Fort George says that 25 to 30 families went to the bush during the winter 1972-73 and most of the remainder hunt and fish around the settlement.

Anthropologist TANNER carried out a general ethnographic study of the Mistassini Indians with particular reference to the Nitchequon group. In 1967 he began working in the Waswanipi region, in Matagami and Dore Lake. He returned to these regions every summer. His main research period of 15 months began in May 1969. He spent the summer in Mistassini Post and in August accompanied a family to the trapping lines where he remained with them throughout the winter until June of the following year when he returned to the Post and continued to live with them throughout the summer leaving in November 1971. The region mentioned includes the Caniapiscau Lake and the Nitchequon Lake which is at the head waters of La Grande River. The whole territory described on the map exhibit P-3 was used as hunting grounds by ancestors of the Indians now living in the territory. They hunt a variety of animals, fish and birds. The total amount of bush meat eaten in one year by 2 families

of 5 members each and the witness was 10,669 pounds. Caribou represented 1,995 pounds, moose 4,622, beaver 1,536, all the fish together 1,426 pounds, ducks 308 pounds, geese 215 pounds, porcupine 110 pounds, and otter 220 pounds. In 1969 and 1970, 9 families were trapping in the Nitchequon area. The witness oulines in dark blue on exhibit P-3 the area where they hunt and trap which includes the region around Nitchequon north as far as quite a distance north of La Grande River, east as far as Caniapiscau Lake, south as far as Odish Mountains and west as far as Dillon. The number of trappers amongst the Nitchequon group has remained stable during the last 5 years, but in the Mistassini group as a whole, it has increased. In 1969-1970, 64% of the total adult male population of the whole Mistassini Band were full time trappers, 17% did at least some trapping and of the remaining 19 who did no trapping 5% of the total of adult males were old or crippled. 75% of the diet of the Mistassini group as a whole came from bush food and the remaining 25% was store food. The whole hunting and trapping territory of the Mistassini reserve shown on exhibit P-4 is presently in use. The Nitchequon Indians stay in the settlement for one month in the fall and several weeks in the spring. Most of the time they are on their trap lines.

Professor ROGERS, an anthropologist, testified that throughout the eastern Sub-Arctic the Indians and Eskimos existed by hunting big and small game and by fishing. They tended to settle in areas where rivers join because these were good sources of food. They remained together in groups and shared animals and fish.

Professor SPENCE, who teaches courses in population dynamics, ecology and environmental physiology, says that the Cree Indians of Fort George settlement fish extensively all around Fort George island and at the first rapids on the La Grande River. In Paint Hills and Eastmain over 90% of the meat consumption is game which comes from the country. In Fort George the percentage is somewhat lower but it is still over 50%. During the period of one year the value of meat obtained from hunting and fishing for Paint Hills and Eastmain was $280,000.00 and that from Fort George $560,000.00.

Such is the position of the petitioners. Let us now examine the testimony of the witnesses who testified on behalf of respondents.

Father STEINMANN, a resident of Povungnituk since 1956 and of the North since 1937 says that insofar as Povungnituk is concerned, the food eaten by Eskimo is in the proportion of 75% store food and the remainder country food. In Sugluk, Inouctjouac and Great Whale Post there are no Eskimo who live exclusively from hunting and fishing. They only hunt and fish part time and they eat the game and fish which they hunt.

THERESE PAGEAU, who lived at Rupert House from 1968 to 1970 and visited Nemiska and Eastmain, says that during winter the majority of the heads of families leave the Post to go to their trapping lines.

LINDLEY, a divisional manager for the Hudson's Bay Company, states that the records of the company indicate that a great number of the members of the Mistassini Band hunt and fish in the bush. A substantial number of Indians from Eastmain, Fort George and Paint Hills use their trap lines. A large number of Indians of Fort George hunt and trap around their settlement. The furs purchased by the company in the area outlined in red on exhibit P-3 are exclusively furnished by Indians and the price of beaver and all other furs has increased in recent years. Witness filed a document I-35 showing the number of jobs filled by the indigenous residents and the dollar sales of merchandise in the areas therein mentioned. The first part of this exhibit concerning jobs will be dealt with later. Although this document deals with 5 fiscal periods, I intend to deal with the last fiscal period namely 1971-72 since this will give us a good indication of the total sales of grocery and other items. During this period the total volume for all the settlements mentioned was $3,017,000.00 for grocery items and $3,032,000.00 for other items. In cross-examination witness states that 35% of the grocery sales are non-food items and 10 to 15% of all sales are made to non-Indians which of course reduces the first figure by approximately half. The net result is that this company sold to the Indian and Inuit population of the settlements of Eastmain, Fort George,

Fort Rupert, Paint Hills, Mistassini, Great Whale Post, Fort Chimo and elsewhere north of James Bay, approximately $1,500,000.00 worth of grocery items. The document states that the Nemiska and Waswanipi Hudson's Bay stores were closed during the periods mentioned.

PILOTE, an employee of a transport Company, lived in the territory from 1958 to 1965. He says that at Mistassini in 1961 food eaten by Indians was in the proportion of 75% store food. Each year the Indians went to their trap lines. Some went by canoe in August and others by plane in October. From the end of December until the end of January an airplane went around to the various camps to pick up furs and to take food to the Indians who were on their trap lines. A second voyage took place in March. The majority returned by canoe in June or July.

LANDRY who worked at Great Whale Post since 1967 says that in 1967 there were 18 to 20 Indian families and about 12 Eskimo families who hunted during 6 months each year. In 1971 there were only 3 Indian families and 2 Eskimo families who could be called hunters. There were Indians and Eskimo who hunted on weekends. The number of caribou killed by workers hunting during their free time was 50 in 1967, 30 in 1968, 125 in 1969, 50 in 1970 and 125 in 1971. Although this witness says that the proportion of country food eaten by the Indians and Eskimo is only 25%, he admits in cross-examination that this is an estimate only. He speaks about Indians fishing and hunting part time, and calls a hunter one who hunts and fishes 6 months per year. The number of hunters from 1967 to 1971 has decreased. During weekends and vacation time the majority of Indians and Inuits go hunting and fishing and those who do not work devote their time to hunting and fishing.

BEAUDET, chief of the fur division for the Ministry of Tourism, Hunting and Fishing, speaks about the beaver trade in the Province. In 1971-72 there were 14,721 beaver lodges with an average of 5 beavers per lodge. The total number of beavers captured was 11,451. In the said period the average income from the sale of furs received by each trapper was $574.00. In 1972-73 the number of captured beavers increased. At the end of his testimony he states that the whole territory is a region which can be used by the Indians for profitable fur trade.

VIGNEAULT, a constable posted to Great Whale Post, says that during the winter of 1968-69 there were at least 15 families trapping, and in 1969-70 3 Indian families and 1 Eskimo family were trapping, 50 to 60 were working full time and hunting and fishing during the weekends. Each winter the caribou hunt takes place at Lake Bienville and Lake Minto. In 1970 125 caribou were killed.

RENAUD, an employee of the School Commission, says that from 1970 to 1972 the majority of the population at Great Whale Post were working in the construction of houses and hunting was diminishing. Amongst the Indians, 4 families spent 8 months hunting at Lake Bienville. Amongst the Inuits, 3 families spent 15 days to a month hunting. In 1970 the Kawapit family returned with 51 caribou; the Co-Op succeeded in killing 18 in 1969, 10 in 1970 and 38 in 1971. During spring and autumn everyone, even the children, hunt ptarmigan, duck and geese from early morning till the afternoon.

ANDRE LEFEBVRE, a local Government agent at Fort George, says that 20 to 25% of the Indians hunt and trap. 90% of the population hunt partridge, geese, duck and bustard around the settlement. The Indians and Inuits fish at the Fort George River approximately 20 miles from the settlement and north of Fort George.

PATRY, superintendent for Hydro-Quebec, has been in the territory since 1967. He confirms that the Indians of Fort George hunt geese during the autumn and the spring, partridge in winter and a few caribou and moose during winter. 50% of the families use their trap lines. They depart October 15th, some returning for the holidays and others in the month of January, February or March. They are away for approximately 3 months. In all the villages of the Old Factory Band, there are hunters and trappers, some of whom are occasional trappers and other trap by tradition. The latter who are less in number remain away from the settlement for longer periods of time. Fishing by nets takes place in the following Rivers: Rupert, Pontax, Jack and Broadback. The fish caught at the first Rapids are smoked and placed in storage. At Nemiska there are 6 to 8 families who spend on the average 3 months in the bush each year. In 1970-71 8 families from Eastmain trapped in the Old Factory Band reserve. 14 tallymen went to the Rupert and Old Factory reserve. At

Fort Rupert those who are not on the trapping lines spend several days to several weeks on short hunting excursions within 10 to 15 miles of the settlement.

GADBOIS, a plumber of Fort Chimo, says that salmon fishing takes place from the beginning of July until the month of September. Eskimo fish for arctic char and grey trout 40 miles from the settlement.

FAUCHON, who was at Fort Chimo from 1967 to 1970 as a member of the Quebec Provincial Police, says 25 to 30 persons were hunting and fishing most of the time. Many families fish in the Koksoak River, particularly in July and August, even if the father or other members of the family work. Even those who work will hunt caribou during weekends in December and January.

Furthermore, in order to show that the dependence of the Cree Indians and Inuits on animals and fish is not as great as petitioners pretend, respondents adduced evidence to the effect that a great number of Cree Indians and Inuits work for salary and that they purchase certain food-stuffs from the stores. The parties admitted (document of March 13th and exhibit P-74) that a large number of children attend school, that the majority of Indians and Inuits buy such staple items as sugar, flour, tea, coffee and salt as well as tobacco, clothes, oil, gazoline, fire arms, ammunition, fishing, hunting and trapping equipment from the stores, that they make use of available health services provided by governmental authorities, and that some make use of motor boats. Many witnesses, Filion, Savage, Boulanger, Vigneault, Renaud, Lefebvre, Patry, Gadbois and Fauchon testified to the effect that Cree Indians and Eskimo frequent the Hudson's Bay stores and the Cooperatives to purchase food and other items. Other witnesses, Pageau, Lepage, Dr. Savoie, Turbide, Barclay, Plamondon and Poitras say that the Cree Indians and Eskimo make use of the free hospital and health services offered by the governmental authorities; that considerable sums of money have been spent by both the federal and provincial government authorities to provide them with homes, water and sewage facilities, electricity and other services; that a considerable investment was made through the construction of hospitals, schools and roads; that wel-

fare payments are made to help them purchase food, clothing, heating fuels and other special needs; that they receive family allowances; and finally that many are working and receiving salaries. A great number of documents were filed concerning the items just mentioned. Rita Dionne Marsolais, an economist, prepared and filed as exhibit I-153 a synthesis of the personal revenues per household and per family. She also filed a document, exhibit I-156, to show the highlights of the economic life of each family. These documents relate only to the population living in the settlements therein mentioned. She concludes that the average revenue per family for the fiscal year 1972-1973 for Fort George is $10,167.00. At first glance this appears to be a very high income. However an examination of exhibit I-153 and her testimony reveals that she included as revenue all the sums paid by the Federal Government authorities for health, education, administration of Bands, other services excluding health, the economic development of Indians, the administration of programs, the maintainance of roads and the treatment of refuse, as well as all the amounts expended by the Provincial Government for the school Commission, health services, other services excluding education and by the Provincial department of social Affairs. These amounts are $359,305.00 and $198,760.00 respectively. Also included as revenue are the sums of $930,101.00 expended by the Government of Canada for welfare, recreation, education, community affairs, consultation and negotiation, allocations to students, special grants, family allowances, old age pension, local initiative programs, and certain other grants as well as the sum of $46,067.00 expended by the Provincial Government authorities for social welfare, school allowances, family allowances and otherwise. This same reasoning on the part of the witness is employed in ascertaining the revenue of the families in the other settlements mentioned.

The reasons given by this witness in support of this method of calculation are not valid. To include in the revenue of an individual the amount which is expended by a municipality or other Government agency for the maintainance of streets, sidewalks and so forth is contrary to good sense and logic. Why should such calcula-

tion be made to apply to the Cree Indian and Eskimo population when such a calculation has never, to my knowledge, been made with respect to the revenue of any other individual in this country. I do not accept the pretention of this witness in this respect.

By removing these figures from the revenues, we find that the revenue per family in the Fort George area, according to the first section and the first column of exhibit I-153, is only $6,439.00 plus the revenue from furs amounting to $85.66. For the other Bands, it is much lower. In other words these figures can be very misleading unless taken in their proper context. For example in Paint Hills, having a population of 586 people, the average revenue per family, excluding the amounts which I said were expended by government agencies, is only $1,766.00. The amount varies from settlement to settlement and on an average is around $3,500.00 for all the settlements mentioned. In counter proof on this particular subject, several Indians and Inuits (Joe Bearskin, William Rat, Philip Cox, Aurélien Gill, Joseph Pepabano, and David Sandy) were heard. Each declared that he never received $10,000.00 in his whole life.

I note that many witnesses produced by respondents confirm the testimony of petitioners that a great number of Cree Indians and Inuits still hunt, trap and fish. The fact thay they purchase certain foods from the stores to supplement their diet does not mean that they are not dependent on the land. Lindley's statement that approximately a million and a half dollars worth of grocery items were sold to the indigenous population in the areas mentioned bears this out. On a pro rata basis the total value of all items sold to one individual does not amount to very much. It is true that a great number of Cree Indians and Inuits work and that in some areas the number of hunters has been decreasing. However their dependence on hunting, trapping and fishing remains evident from the testimony of all the witnesses and the documents filed as exhibits. Beaudet for example testified that for the year 1971-72 each trapper received $574.00 from the sale of beavers and that in the following year the number of captured beavers increased. The testimony of the anthropologists Feit and Tanner is

also very important and shows to what extent the Cree Indians in the areas mentioned by them are dependent on animals, fish and birds.

This evidence leads to the following conclusions:

a) The Cree Indians and Inuit population occupying the territory and the lands adjacent thereto. have been hunting, trapping and fishing therein since time immemorial.

b) They have been exercising these rights in a very large part of the territory and the lands adjacent thereto including their trap lines, the lakes, the rivers and the streams.

c) These pursuits are still of great importance to them and constitute a way of life for a very great number of them.

d) Their diet is dependent, at least in part, on the animals which they hunt and trap, and on the fish which they catch.

e) The sale of fur bearing animals represents a source of revenue for them; and the animals which they trap and hunt and the fish which they catch represent, if measured in dollars, an additional form of revenue.

f) The hides of certain animals are used as clothing.

g) They have a unique concept of the land, make use of all its fruits and produce including all animal life therein and any interference therewith compromises their very existence as a people.

h) They wish to continue their way of life.

PART IV

1. Description of the project

The nature of the hydroelectric project was described by several witnesses and is contained in several documents filed as exhibits. I wish to briefly refer to the description given in exhibits P-5 and P-28. At full capacity, the James Bay project could produce three times the power of Churchill Falls in Labrador, now the biggest in America. Four powerhouses will be installed using the entire head available between elevation 1245 feet and sea level. Over and above the forebays which will be created by construction of main dams and dykes at each power site, three reservoirs will be built on the upper reaches of the rivers to be diverted. One of these will be on the Grande Baleine river and two on the Caniapiscau. In total, the basic complex involves the construction of four powerhouses, four main dams, 18 spillways and control structures, and 80 miles of dykes.

The four powerhouses will be distributed along the river for a distance of 300 miles from the coast.

The LG-1 scheme will have an installed capacity of 920,000 kilowatts, and will be 23 miles up river from Fort George. At this site, the powerhouse and spillway will form an integral part of the dam, which will consist of zoned embankments constructed of clay, sand and gravel, and rockfill. The powerhouse will be located in the river channel and will contain eight units each with 115,000 kilowatts capacity.

At LG-2, 73 miles from Fort George, the installed capacity will be 4,410,000 kilowatts. This underground installation will be the most important of the entire complex, and will constitute the first stage of development. The main dam will be four miles upstream from the powerhouse.

The power installation at LG-3 will have a capacity of 1,500,000 kilowatts and will be 148 miles from Fort George. It will be an above-ground powerhouse similar to that at LG-1 and will be constructed on the river bank. The main dam will be a zoned embankment constructed of glacial till, sand and gravel, and rockfill.

Finally, LG-4 (288 miles from Fort George) will have an installed capacity of 1,500,000 kilowatts. Like LG-2, this powerhouse will be located underground.

The LG-2 development will be constructed as the first stage of the complex and consequently is most important as far as these proceedings are concerned.

The complex La Grande comprises the whole of the La Grande River basin plus ½ of the Great Whale basin, 28% of the Caniapiscau and Koksoak River and the greater part of the Opinaca River basin; the latter is a natural tributary of the Eastmain River.

The description of the project given by Skinnarland is clear and precise. He states that, since electric power is generally used at a uniform rate, the flow of the rivers will be arranged in such a way that it will become almost constant. Reservoirs are used to store water and will fluctuate with the use of the water. The present rapids will disappear. The three major diversion schemes are the following:

1.- The construction of a dam on the west side of Opinaca Lake and diverting the water from Opinaca River into Sakami Lake to the north which in turn runs into the La Grande River. After this dam is built and the diversion takes place, there will be no more water coming down this river above the dam at Lake Opinaca. This represents just about all the drainage basin for the Opinaca River.

2.- A dam will be built on the Great Whale River and the water which presently flows through that river will instead be diverted to the Kanaaupscow River and from the latter into the La Grande River to the area above what will in the future be referred to as site LG-2. The drainage basin of the Great Whale River is an area roughly 200 miles east-west and 50 miles north-south and is indicated with the letter G-W on planche 3-A of exhibit P-28.

3.- The next river to be diverted will be the Caniapiscau River that normally runs to the north-east into Ungava Bay. To show where this will take place witness inscribed the letters CAN. across the area on planche 3-A of exhibit P-28. A dam and dykes

will be built in order to divert the river to south-west into the upper part of the La Grande River. The upper part of this basin is an area of 9,630 square miles. The remaining part of this basin which is referred to as the lower or the Delorme part of the diversion is the area which will be diverted into the La Grande Baleine River to the north-east, and, in order to do this, a dam will be built across the original Caniapiscau River and the waterwill in the future flow into the upper part of the La Grande Baleine area. The drainage area of the lower Caniapiscau basin or as it is called on in P-28, the Delorme basin, is 4,610 square miles.

In the southern part of the drainage basin a dam will be built just west of Fregate Lake so that the water from this lake will flow into the La Grande River above LG-3.

The main drainage basin which will be affected is 37,850 square miles to which must be added the drainage basin of each of the 3 schemes totalling 26,440 square miles. The total area affected is therefore 64,290 square miles. The diversions will reduce the flow of water as follows:

a) The entire flow of the Opinaca River will be diverted into Sakami Lake and since it is a tributary of the Eastmain River, the latter at its mouth will be reduced by 20%;

b) All of the water of the Caniapiscau River will be diverted into the La Grande River and the flow of the Koksoak River at its mouth will be reduced by 20%;

c) 38% of the total flow of the Great Whale River will be diverted into the Kanaauspscow which in turn will be diverted into the La Grande;

d) All the water of the upper Sakami River will be diverted from Fregate Lake into LG-3 reservoir.

The mean reduction in the annual flow of the rivers in cubic feet per second will be as follows: Opinaca 7,000, Caniapiscau 18,000, the lower part of Delorme Reservoir 8,600, The Great Whale River 9,000.

The total flow of the La Grande River will be increased from 58,000 to 104,000 cubic feet per second and will remain constant all year. The section of the river which is shown in white

on planche 21 of exhibit P-28 or on A-8 of exhibit P-5 and is approximately 2 to 2½ miles in length will remain permanently dry. In order to permit construction of the dam, the La Grande River must be diverted during the construction stage and to accomplish this 2 tunnels will be built to by-pass the area where the dam will be built. These tunnels will be 2,000 feet in length. The process of filling the reservoir will take up to one year and during this period no water will flow below LG-2.

At LG-1 and LG-2, the sites of the first two reservoirs on the La Grande River, the rapids will disappear. A new body of water 10 miles in width will be created at LG-2. Before construction this same body of water is not much more than one mile in width. It will vary 35 feet up and down and there will be large areas where the trees will remain in the water. Some areas will at times be flooded and will at other times be dry, depending on the fluctuation of the water.

Under present plans LG-2 will be built first followed by LG-3, LG-4 and finally LG-1. As a result of LG-2, 3,407 additional square miles will be flooded which added to the present area will make a total of 4,452 square miles. The flooding will extend in some areas up to 12 miles and in other areas up to one mile from the present shores of La Grande River. The present rivers and lakes which are shown in dark blue on A-5 of exhibit P-5 will be submerged by the flood waters. Every year, in the winter, the water level in the flooded area will be reduced and the shore lines will be changed.

The present plans envisage the construction of a spillway for LG-2 so that waters can spill into a valley which now has only a small brook. This spillway will be used particularly during the impounding of the water. The capacity of this spillway will be 360,000 cubic feet per second which will form a flow of water larger than that of the St-Lawrence River. After the water enters this spillway, it will follow the natural contours of the ground and it will cover an area of 10 miles in length and between 200 to 300 feet in width before it reaches the La Grande River.

In order to gain access to the project, a road from Matagami to LG-2 and from the latter to Fort George is presently

under construction. Airports at LG-2 and Fort George are presently being built and a dock for unloading ships has been installed at Fort George. A construction camp followed by a permanent village will be situated near LG-2. Many temporary construction camps are presently in use and will have a capacity for approximately 4,000 workers during 1973.

The effect which all these works will have on the ecology and the environment will be discussed later.

2. Schedule of production

The time table for the construction of the project is described by two witnesses, Einar Skinnarland, and Paul Amyot. Exhibit P-28 contains a summary description of the complex La Grande with special reference to the time schedule at pages 22 and following and the plates attached thereto (particularly plate P-1 and P-2). I intend to deal briefly with this subject with particular emphasis on what will take place during the current year 1973 and in 1974 since these are the important years in so far as the present application for an interlocutory order of injunction is concerned.

An access road from Matagami to Fort George is actually under construction. Work started at the end of 1971. On January 6th 1973, date of the preparation of exhibit P-28, the first 175 miles were passable and contracts for the construction of the remaining 260 miles had been given out. The whole road will be passable by November 1st 1973 and will be completed for all traffic by April 1st 1974.

The road from Fort George to mile 390 and from the latter point to the airport at LG-2 will be passable by August 1st 1973 and totally completed one year thereafter.

The existing wharf and dock at Fort George island were repaired and were to be reactivated in June 1973 to receive heavy equipment delivered by ship. Airports at Fort George and La Grande were scheduled for completion by 15 July and 1 August 1973.

Insofar as the complex La Grande is concerned the first dam and reservoir to be built will be at LG-2. The first con-

tract for the diversion tunnels has been granted and a second contract in respect thereof was to be entered into within a few months from the date Amyot gave his testimony. Delivery of equipment for the tunnels was completed on 15 April 1973. Advertising for tenders to excavate the portals for diversion tunnels has taken place, and construction of the portals was scheduled to start on 1 May 1973. The actual construction of the tunnels will commence on 1 October 1973 with the completion to take place prior to 1 October 1974. Certain preparatory work such as blasting and drilling, and transporting excavated material will occur between April and October 1973.

Plans are presently being prepared for the principal dam at LG-2 so that the tenders can be called for towards the end of 1973. The construction of the dam at LG-2 will start in 1974 and continue until 1978, and, during this time, the flow of the La Grande River will be diverted through tunnels and there will be no fluctuation in the flow of the river. It will take a year to fill the forebay at LG-2 and during this period (in the year 1978) the entire flow of the La Grande will be cut off.

At the end of 1973 a definite decision will be taken with respect to the quantity of water which will pass through LG-2, and commencing in 1974 tenders will be called for the construction of alternating turbos. Construction of dykes will take place commencing 1974 and the construction of spillway in 1975, but it is possible according to Amyot that the construction of the spillway will commence prior to 1975. Underground work will start in the beginning of 1974 and other works which the witness mentions in detail will also start in 1974. Amyot says that the complex La Grande, as it is presently envisaged, will become finalized at the end of 1973.

In cross-examination Amyot says that the construction of workers' city will commence during the summer of 1973 so that there will be 350 buildings ready in the latter part of 1973 to accomodate the first 1,000 workers. In 1974, there will be 2,000 and in 1975 4,000 workers on the site. At the beginning of winter 1973-74, there will be a total of approximately 5,856 persons installed between Fort George and LG-2. Of these 1,000 will be at LG-2

and the remainder spread out amongst the camps of the contractors building the road from Matagami to LG-2 and LG-2 to Fort George.

The construction of LG-3 will commence in 1975 followed by LG-4 and LG-1.

According to exhibit P-36, great quantities of equipment and materials will be transported into the territory, for example, in 1973 20,000 tons of equipment and materials will be moved into the area, in 1974 75,000 tons and by 1978 this quantity will increase to 400,000 tons.

Extensive topographical, geophysical and hydrological investigations will also be carried out during the next few years (exhibits P-28, P-29 and I-85).

There will be a very high level of activity in the Fort George to LG-2 area during 1973 and 1974 and these activities will of course increase as the number of men brought into the area increases.

The transmission lines which will be erected to bring the power to Montreal will require the clearing of corridors 600 miles long and approximately 600 to 800 feet wide. Skinnarland says that although the date when the installation of these lines will commence is not mentioned in the schedule, it must be at least two years prior to the completion of the power installation in 1980.

The work envisaged for the whole project will be completed in 1980 at which time the project, if completed, will be producing electricity.

It is also interesting to note that, according to Skinnarland, by the end of 1973 the project as far as LG-2 is concerned becomes irreversible.

PART V

DOES THE PROJECT INTERFERE WITH OR VIOLATE THE RIGHTS OF THE CREE INDIANS AND THE INUITS

Much was said and many documents produced concerning this particular subject and consequently its treatment must of necessity be lengthy. A detailed examination of the evidence of each witness is necessary to determine what impact, if any, the project has had and will have on the life of these people and the land which they occupy as well as on the animals, the fish, the mammals, the birds, the lakes, the rivers and the streams.

Many of the witnesses testified about various matters. Rather than deal with the entire testimony of each witness separately, I intend to deal first with the general effects of the project and then separately with each of the classes of subjects enumerated below. It seems to me that this will simplify the presentation of the material. I realize of course that some subjects are inter-related and that portions of the testimony of certain witnesses may have to be repeated twice.

1. General effects of the project.

Professor POWER, a specialist in fresh water biology and in arctic zoology, says that the increase in the mean annual flow of the La Grande River, the building of dams, foredams and forebays, and the turning of the La Grande River into a series of lakes is equivalent to a natural catastrophe of major proportion. In terms of natural events, it is the equivalent of 5 major landslides blocking portions of this river system. This will have a disruptive effect on the fish populations that inhabit this river. He then deals specifically with the effects which the project will have on various varieties of fish which I will discuss later.

SKINNARLAND, a consulting engineer specializing in the planning and erection of hydroelectric construction refers to the principal effects of the project. Some major rivers will be completely shut off and the flow below the diversions will be greatly

reduced. The flow of other rivers will be greatly increased, for example the upper part of La Grande, the Great Whale, and the Kanaaupscow and this undoubtedly will have physical effects on the terrain over which they flow. There will be a great variance in the flow when old rivers are used as spillways because the tremendous flow which presently takes place will be considerably reduced so that after diversion there will be very little water. The flow reduction in each river is equivalent to the water which is diverted therefrom. The flow of La Grande River will be increased from 58,000 to 104,000 c.f.s. and as soon as the diversionary tunnels at LG-2 are closed there will be no flow and no spring floods will take place below LG-2 for as much as one year. The ice on the reservoirs will melt at a later date than the ice in a flowing river. When larger than normal floods occur and water cannot be stored in the reservoirs it will become necessary to spill the water from spillways into the original river beds and unusual conditions, such as additional erosion, will occur when this takes place. The diversion of rivers will erode river beds, create new river banks, and make reservoirs larger, thereby flooding additional land. Each year the water level in the reservoirs will fluctuate to the extent of 10 feet in Bienville, 25 feet in Puisseaux and 40 feet in Caniapiscau.

RICHARD ELLIOT, a biologist, filed as exhibit P-50 a map issued by the Federal Department of Mines and Technical Surveys which covers the area of the La Grande drainage basin as far east as longitude 70 and the Puisseaux reservoir, as far south as the mouth of the Eastmain River, and as far north to include most of the Great Whale River. Superimposed on the map in red ink are approximate outlines of trapping areas, and in dotted blue ink approximate areas to be flooded by the proposed reservoirs and forebays of the project. This map shows the location of LG-1, LG-2, LG-3, LG-4, the three towns of Fort George, Paint Hills and Eastmain; at LG-1 a label indicating a white fish spawning site; at the mouth of the Sakami River, a label indicating sturgeon spawning sites; labels indicating the direction of the flow of water from Opinaca reservoirs to Sakami Lake and to LG-2 reservoir which is the Opinaca diversion; and a

label showing the Bienville diversion through the Kanaaupscow system to LG-2 reservoir. The location of the proposed road, Matagami to LG-2 and Fort George, is also shown. The dotted blue lines are the perimeters of the areas to be flooded. The purpose of producing this map is simply to show in global terms the superimposition of the project upon various trap lines and certain areas of particular interest to the Indian people such as the spawning grounds of the two fish species mentioned on this map.

LANGLOIS, an engineer with experience in the construction of dams, testifying on behalf of respondents, says that the area of the trap lines is 135,228 square miles and only 2,492 square miles will be flooded by the reservoirs. Within the complex 3,407 square miles of land will be flooded and this represents only 5.3% of the total. In cross-examination he adds that this figure, which is found in exhibit I-8, does not include the land flooded by reservoirs outside of the territory. In speaking of damages he makes this statement:

> "Enfin les dommages, il y avait certainement des... on savait qu'il y avait des possibilités sur la forêt, que certaines forêts seraient détruites, que ce terrain n'allait pas pouvoir donner la forêt qu'il donnait, mais enfin, il s'agit de comparer deux choses: est-ce que l'avantage économique au point de vue développement de la resscurce hydraulique est plus grand que le dommage ou que le gain qu'on peut faire en exploitant une forêt?"

In speaking of the general effects of the project AKYOT, an engineer with experience in dam construction, also testifying on behalf of respondents, said that the object of the project is to develop hydroelectric power, open up the territory to the rest of the Province by constructing roads and airports, create jobs for the Indian and Inuit population (as a result of the construction of roads), and permit the exploitation of the forest and mineral resources in the area. He admits that parts of the banks of La Grande River will be flooded. 9,600 square miles of land within the territory are presently covered by water and this figure will be increased by 1/3 namely 3,400 square miles. Land in the immediate vicinity of the reservoirs will at times be submerged due to the fluctuation in the level of the water. The territory is very poor in vegetation compared to the region close

to Nottaway River. At page 81 of his testimony he testified as follows:

Q. "N'est-il pas vrai que toutes les rives de la Grande Rivière seront inondées d'une façon très importante?

R. Non. Si on regarde le plan, ce qu'on voit là-bas, il y a une partie des rives qui vont être inondées entre LG-1 et LG-2, entre LG-2 LG-3, entre LG-3 LG-4. A l'est de LG-4, il n'y a qu'une petite distance qui se trouve à être inondée, le restant de la rivière reste naturel, jusqu'à temps qu'on arrive au Réservoir Puisseaux où il y a une autre partie des rives qui sont inondées. Mais entre les deux, il y a une grande partie du territoire qui n'est pas touchée du tout. Et ça ressort très bien du plan là-bas."

Many Indian and Inuit witnesses spoke about the effects which the project will have on their traditional way of life. Animals are being disturbed, the beaver will be eliminated in many areas, spawning areas of fish will be destroyed, fish and caribou will disappear, and land will be flooded creating adverse effects on the flora and fauna.

Let us now turn to the evidence of the experts concerning the effects of the project on the specific classes of subjects hereinafter mentioned.

2. Animals generally.

Professor FENTON, a specialist in biology, states that the rising water will displace terrestrial mammals and if there is no upland area to which they may go they will drown. If the upland areas are poor in carrying capacity those who move there will die from starvation. The aquatic animals such as beaver and muskrat will be displaced from their dens and will die. In reservoirs the fluctuation of waters of 30 feet and more will have devastating effects because the vegetation on the shoreline will not have a chance to re-establish itself. The increased flow in rivers may destroy the wetland. Land flooding reduces the space for land animals. Green plants convert solar energy to chemical energy and this is what provides food. Many animals from insects to moose feed on plants and some live on smaller animals who in turn depend on plants. By destroying vegetation you destroy the system. Witness says that the effects which he describes took place at Churchill Falls. This land took 8,000 years to develop an ecological balance and the ani-

mals who must live on dry land cannot live elsewhere.

MOISAN a biologist and director of the Quebec Fauna Service does not foresee any catastrophic or irreparable effect on animals generally.

). Beaver & otter.

TANNER, an anthropologist, says that the area is very rich in beaver and otter. Otter lives close to open waters such as rapids and waterfalls that remain open all through the year, and feeds only on fish. They are strictly a water animal although they are in and out of the water a lot. They may travel from one lake to another but normally the tracks are seen close to rivers. The beaver lives entirely in rivers and lakes, mainly lakes. In summer they go considerably far inland to get their food, but in winter they have a storage of food in the lake itself and they remain entirely in the lake.

According to professor DUNBAR, a specialist in oceanography, some inland mammals such as otters and other fisher cats depend upon fish for their livelihood and these will be affected by reducing the river run of char and salmon.

In speaking of the effects of spring flood professor GILL, a specialist in boreal and northern ecology, says that the wetland habitat along the rivers and lakes are especially important for aquatic mammals and interference therewith will have adverse effects on them. The food base of beaver will be reduced, beaver will suffer, and the perpetuation of its numbers will not be assured. Flood control will also adversely affect otter which is an aquatic mammal and preys upon fish. Some animals such as muskrat are not thinking animals and if their habitat is reduced, they do not move out and try to find a new location, they will simply stay there and suffer the consequences and although they themselves may not perish, their reproduction is going to be greatly modified. The most far reaching effect will be the reduced ability of animals to propagate. Virtually all animals in the north are affected to one degree or another by impoundment.

Professor CLOUGH,who specializes in ecology and the geography of polar regions, worked in August 1972 in the James Bay area concentrating on the beaver which, in his opinion, is the most important animal to the Indians and this animal will be severely affected by the project. In the area from Fort George to LG-3, beaver is abundant and they restrict themselves to a proper habitat area which occurs only along the shores of lakes which have little fluctuation in the level of water, ponds and slow flowing rivers. They feed on willow and alder shrubs which are found along the edges of waterways where the wetland habitat is only 5 to 50 feet in width. In the region which he surveyed beaver is at the carrying capacity of the land. Other mammals such as lynx, moose, bear and geese also use these wetland habitats. As a result of the project some beaver in the flooded area will immediately perish, others will be driven out and will try to go elsewhere but will not survive long because they will not be tolerated in their new territory. Consequently most of the beaver will be lost. He comes to the same conclusion with respect to other animals such as otter, mink, wolverine and other mammals such as mice, hare, rabbits, squirrels, which may survive depending on what stage of the life cycle they are in when the flooding occurs. If the water levels of a reservoir fluctuate more than plus or minus 4 feet, the beaver cannot survive because wetland vegetation will not be able to establish itself. The diversion of the Kanaaupscow, Opinaca and Caniapiscau rivers will result in the loss of beaver habitat and consequently the number of beaver will be reduced. Beaver cannot live in stagnant waters or bog areas. The ecological effects of the flooding are much greater than the percentage of land involved. In speaking of numbers he says there might be 2,000 beaver lost in 6 months or 1 year.

4. Caribou.

Professor HARE, Director General of Research Coordination in the Federal Department of Environment, describes caribou as a fast moving animal. They remain in the north in summer and tend to move south into the woodland zone or sometimes the forest

tundra in the winter. They have special periods when they produce their young. The 3 important habitats are the winter habitat, the summer habitat and the area where they produce their young. There has been very little study done on the habits of caribou. In the Delorme-Caniapiscau area the caribou feed on lichen. If the area flooded happens to be an area where the caribou has fixed migration paths or is where they calf, they may refuse to migrate and the herd will disperse. The caribou are herding social animals which migrate by tradition. They have fixed habits and every year they retrace the same route. They use the same areas for winter food and the same area for summer grazing.

Anthropologist TANNER, who in December 1972 spent 3 weeks in a hunting camp 160 miles north of Mistassini Post, saw many fur bearing animals. He saw signs where caribou had been eating along the sides of lakes. He saw caribou in an area 30 miles west of Nitchequon and north of La Grande River, north-west of lake Puisseaux. Indians only kill as many caribou as they need. On one occasion they could have killed the whole herd, but they killed only 12 animals and left the rest of the herd intact. Caribou tend to be in small groups of 5 to 30; they wonder erratically whilst in the forest, live on lichen, and their natural enemy is the wolf. During the winter they are often on the top of treeless hills where the wind blows the snow away and they can get at the moss easily. Later when the sun removes the snow from the rocks they will descend to the lakes where they can eat lichen. It is usual for caribou to go on ice.

Professor GILL says that caribou is the same species of animal as reindeer. In Scandinavia studies have shown that above impoundments winter drawdown of water creates veritable death traps for reindeer because shore fast ice stays fast and a narrow wedge of shore fast ice is maintained along the shore and as the reservoir is drawn down, there is a series of steps and if the reindeer try to cross these steps, they may not be able to make it and they cannot get out. A large number of reindeer have been killed in Scandinavia this way. It's very reasonable to assume that similar things could happen to the caribou populations because they react in similar ways as the reindeer.

COOK, who studied plants and animals in relation to the environment, and earth processes, states that caribou in the Caniapiscau-Delorme area is dependent on lichen. In winter the caribou are dependent on the continued presence of arboreal lichen for their food supply because when the snow becomes too hard or too deep for them to forage ground lichens, they must depend on the arboreal lichen. The flooding will also affect the calfing, rutting and migration. The essential thing to remember is that caribou requires arboreal lichen for sustained winter food supply. Lichen grows only in old aged stands of trees, and these are fairly limited in abundance in the region.

Professor BANFIELD, a caribou specialist, says that the caribou favors the Caniapiscau-Delorme area. In this area the forest is rich, the climate suitable and much food is available. Caribou do not frequent burn areas such as is found around the Bienville area. Their habitat is restricted particularly in winter when they must live in mature forests and open woodland where they find lichen. The bulk of the herd in the Caniapiscau-Delorme area migrates north to the Larch river basin in summer. The Caniapiscau-Delorme area and the Puisseaux Reservoir are important to caribou. The fluctuation of water in reservoirs will have detrimental effects. In April the caribou spend a great deal of time on lakes, they bed-down and chew cud. The fluctuation in the water level will become a hazard, because they will have difficulty to get on and off the ice and may give up such an area. It is not possible to say that they could go elsewhere because other areas are probably used to capacity. Flooding will therefore reduce the carrying capacity of the land and will result in fewer caribou. The natives use the meat of the caribou for food and the hides for clothing. It is therefore a very important animal to the native particularly in the interior where water mammals such as seals are not available. There will be a measurable and a significant drop in the population of caribou as a result of the project, and if there are massive burns as a result of human activity the effect will be devastating. The project will also have a bad effect on moose by destroying the wetland habitat which they use. In cross-examination he states that there are caribou in

the head waters of La Grande but not in downstream waters. Caribou are also found in the Opinaca area and the odd caribou at LG-2.

TAYLOR, a geomorphology and hydro meteorology expert, says that as a result of the fluctuation of water levels in impounded areas, ice will freeze at higher levels and as the water is used up the ice will collapse, there will be cracking along the edges of the lake and the ice will be unable to support weight.

Witness Marcel VIGNEAULT, a constable of the Municipality of James Bay, testifying on behalf of respondents, said that the Indians and Eskimo of Great Whale Post hunt caribou each year in the month of February at lake Bienville and lake Minto. In 1970, 125 caribou were killed.

Professor MICHEL, doctor in hydrodynamics, says that ice along the river banks will crack with a lowering of the level of the water in a reservoir in the winter. The central portion of the ice follows the level of the water, it takes only a few inches to crack the ice, but these cracks do not present any problem and a person who is on the crust of the ice can reach the bank.

MOISAN, director of the fauna service, produced a card, exhibit I-130, which is connected to exhibit P-86. The dark blue portion represents herds of caribou having a density which is almost consistant, that is one sees caribou continually whilst in flight. Hachured areas correspond to regions where one observes from time to time groups of caribou numbering 5 to 35. Last year the inventory only touched, without us knowing it, that part where small groups of caribou were observed. The southern limit of the region where the inventory was carried out last winter is the area to the north, and lake Mistassini. Migrations of caribou take place in a general north-south direction. They pass the winter in the wooded areas and they then go towards the north in spring, probably in March or April. The works concerning the dams LG-1, 2, 3 and 4 and the other works which are being carried out in the territory do not have anything to do with the migration of caribou. The general direction of the important herds is probably always almost the same, but the detailed paths which they follow each year are much less constant. Along the La Grande, there is no important concentration

of caribou. The mass of the caribou population of New Quebec is north of La Grande. There is however a herd north of Lake Mistassini. It is of small density consisting of small groups evaluated last year at approximately 1,000 head. There is also a herd of caribou near Lac Delorme-Caniapiscau. Caribou prefer keeping to the heights rather than the valleys because the heights are better drained and are better areas for the growth of lichen. In spring the caribou is found mostly on ice. They have a tendency to go to the same regions but probably not always to the same places. According to this witness the great mass of the population of caribou of New Quebec is north of the La Grande River and the complex la Grande. The changes in the number which will result are surely not measurable. I. referring to the testimony of Cook who pretends that the migratory routes in the region Delorme-Caniapiscau will be flooded, the witness replies that the only direction caribou can take to reach calfing ground is a northerly direction which has yet to be determined but which is surely further north then the Lake Delorme-Caniapiscau. Consequently the migration routes will not be changed by the flooding. In cross-examination he says that the wintering grounds for caribou will be affected by the flooding of Lake Delorme and Lake Caniapiscau and they will be obliged to find other places. If the animals go to Lake Delorme and Lake Caniapiscau, year after year, it is because the habitat at those places suits them. The wintering grounds require a certain great quantity of lichen. But not withstanding the flooding certain islands will remain occupied and will be used by the caribou. If they are unable to find any places which suit them, they will be forced to move as the caribou normally does in winter when the snow conditions do not suit them. In speaking about the large cracks which form around a reservoir between the moment when caribou go on the ice in the morning and the moment when they return in the evening, he supposes that it is possible that the cracks in the ice appearing close to the banks can present an obstacle for the caribou to reach the top of the bank. One can easily relate the herd along the Koksoak River to the herd around Delorme-Caniapiscau

and this same herd continues to Lac Mistassini but in a much lesser density. It is possible that their migration route will be disturbed by flooding. The caribou is most dense in the Delorme-Caniapiscau region and it is probably because in that area they find [illegible] table lichen. This herd is estimated between 4,000 to 5,000 head. It is possible that the caribou population will be decreased to the extent that the habitat is decreased, that is 15 to 20%. Moose require as food a special habitat near rivers and lakes and if these habitats are flooded, they will be forced to go elsewhere. With the construction of roads, moose will go towards the north. Fluctuations in the level of the reservoirs cannot benefit the caribou.

5. Seal.

Professor DUNBAR says that by reducing the flow of rivers significantly, say by one third or one half, you reduce the production of the food supply and this adversely affects the seal. If the flow is reduced for 3 or 4 years and then it is put up again the situation would be restored but during that period the food conditions in the area of the mouth of the river would be very much reduced and seals would disappear from that area. The ring seal pups on ice and their numbers are directly related to the complexity of the coast line and hence to the duration of the stay of fast or shore ice each year. If that ice is destroyed the young seals will simply die. However, there is a positive effect in that seals will breed and maintain their young happily on fast ice and consequently it is advantageous that the fast ice should remain there as long as possible. However if there is no food, seals must move to areas where they can obtain food so it is more important that the fo[illegible] be available to them. Seals are vitally important to men all over the north, and the further they have to go to hunt them, the worse off they are. The relation between the seals and fresh water outflow is simple enough. It is simply that seals are dependent upon crustacea and small fish, and the latter are dependent upon plant production which in turn is dependent upon a supply of nutrients, phosphates, nitrates, silicates and the latter is dependent

upon the extent of the fresh water inflow in coastal areas. By reducing the flow of the river particularly the spring outflow fish population reacts negatively and this has an adverse effect on the seal.

ELLIOTT joined the James Bay Task Force to study the seal and whale population. In Great Whale River two types of seal are taken: the ringed seal and the bearded seals. The Inuit population took 2,000 ringed seals and 50 bearded seals representing 80,000 pounds of meat. In addition they took 15 small whales representing 9,000 pounds of meat. The seals are used for food and most of the pelts are sold through the Hudson's Bay Company. The total received for such skins was $14,000.00. In the previous year, that is 1971, both types of seal produced about 45,000 pounds of edible meat. Indians of Great Whale do not catch many seals and whales and consequently they do not constitute a very important source of food for Indians.

MANSFIELD, research manager in marine biology and director of the arctic biological station of the Department of the Environment, testifying on behalf of respondents, confirms that the 2 important species of seals in the James Bay and Hudson's Bay region are the ringed seal, which is the most important species hunted in all areas of the north by the Eskimo and forms the backbone of the Eskimo economy in the North, and the bearded seal, which is much larger but nowhere near as common as the ringed seal, but forms an important part of the Eskimo economy in all the Arctic settlements in the North. The ringed seal is dependent on the quality and quantity of ice for its successful breeding. There are 200,000 ringed seals in Hudson's Bay, and about 50,000 in the Ungava area. There is no estimate of the population for James Bay although his estimate is that there could be about 70,000. In speaking of the effect which the reduction in flow of the Great Whale River could have on the estuarine current and sea vegetation he says that seals are not estuarine animals and consequently it would have no effect upon them. The white whale is found in small numbers along the East coast of Hudson's Bay, occasionally in James Bay, and occasionally in the estuary of the Koksoak River. There are seals pupping near Great Whale River along the coast.

6. Fish.

Professor DUNBAR speaks about the importance of maintaining the outflow of fresh water in coastal areas in order to maintain the productivity. The less the outflow from the land, the lesser the supply of nutrients leading to less production of plant cells which in turn means less animal plankton which feed on the plants. Fish eat plankton animals and seals eat part of the latter and part of fish. Many fresh water fish such as atlantic salmon, arctic char, white fish and speckle trout go down into the sea. Salmon and char particularly obtain their growth in the sea. A decrease in the general productivity of marine life in the coastal areas will have adverse effects. It will affect the migration of salmon back up stream and possibly in its migration down stream. Salmon will lie off the mouths of rivers at their normal migration time to wait for a sufficient volume of fresh water, and if that water does not come down, sometimes they will simply fail to migrate up the stream and this means that they will fail to spawn. The effect on the arctic char would be more significant because they do not go so far away and they depend upon the local food resources. The effects referred to are applicable to the rivers flowing into the southern part of Ungava Bay and those flowing into James Bay. He concludes that if you reduce the flow significantly, say by one third or a half, you reduce the production of both crustacea and capelin and therefore reduce the food supply for char and seals. Later in his testimony he refers to the reduction in the flow of the Koksoak which will reduce the fish population, and the drastic reduction of the flow of the La Grande River for a period of 2 or 3 years which will reduce the population of the char in the vicinity of the mouth of the river. White fish are for the most part sea run, like char and salmon, but they do not go very far from the river mouths. Therefore the local production of food is vitally important to the 3 of them and probably in the order of white fish, char and salmon. It will also lower the population of white fish which is a very important fish for the local economy in the northern area.

COOK says that as a result of the flooding of wet-land habitat there will be floating masses of vegetation in the lower La Grande area which may cause problems at the turbines and upset the nature of fish spawning.

Professor POWER spent 6 summers working in the area. Brook trout, lake white fish, pike, sturgeon, other species of white fish and other smaller species are found in La Grande River. The increase in the mean annual flow of the La Grande River, the erection of dams and the creation of power pools will have a disruptive effect on the fish populations that inhabit this river. The witness then explains in great detail the living and spawning habits of trout and white fish concluding that there will be a very severe reduction of trout population even the elimination or extinction of some of them and that it would take 20 to 50 years for a new balance to occur. White fish will also lose their spawning sites resulting in years of unsuccessful spawning and a reduction in the white fish population. If the flow of water out of LG-2 is stopped or severely reduced for a period of about one year to allow the filling of the forebay, the fish populations will be affected. If there is very little water, the fish populations will be decimated. If there is a reasonable amount of water, some of them will survive. Populations will recover, particularly since some of the tributary streams will supply further fish, and a new balance of the fish population will occur but this may take from 20 to 30 years assuming that no other drastic changes occur. Rapids provide ideal feeding areas for fish and native people have a great deal of detailed knowledge about this sort of thing and they know where to find concentrations of trout or white fish and they rely on finding them in these places for their very existence in the bush.

Witness says that it must be remembered that there is not an abundance of fish in northern waters which produce 3 pounds per acre in comparison to 40 pounds per acre in the south. With respect to land locked salmon in the lakes in the upper part of the area, the traditional spawning sites will be flooded and eliminated as a result of the flooding of the reservoir at the head of the Caniapiscau River. When the system is completed salmon will be intro-

duced into the northern portion of the La Grande system through the spillways and the turbines, that is, assuming that there are many of them left. However this process may take from 10 to 50 years. The whole evolution of the behavior of salmon is designed to fit the environment in which they live. If that environment is changed, salmon will suffer adverse effects. Witness then describes the difficulties which the fish will have to spawn. The diversion of substantial volumes of water from the Great Whale River will reduce the river in size and there will be less space for fish to live and therefore less fish. The amount of terrestrial food in the river will be reduced which will further affect the fish population. At the estuary the reduction of the fresh water flow will reduce the productivity of the estuary by 40% and consequently reduce the number of fish. The use of the spillway will also adversely affect marine life. According to the witness this kind of activity is equivalent to a climatic disaster of major proportion. The channel of the Kanaaupscow River is not designed to take large quantities of water and consequently there will be a great deal of bank and soil erosion until the channel becomes big enough to carry the additional water and during this process everything is disrupted, insects, fish and so on. A lot of the debris, the sediment, and overburden from the surrounding area will probably end up in the reservoir of LG-2 where it will smother the bottom and reduce the chance of good spawning areas. Repeated floods and changes in flow do not give the organisms a chance to adapt to the system.

The diversion of the waters from Lake Opinaca and Lake Sakami into the Opinaca River, and from Eastmain River into the La Grande system will have the same effects. In addition, the sturgeon congregating areas in that tributary will probably be affected and may no longer be available to the natives.

In speaking of the Koksoak River witness says that the records of the Hudson Bay's post at Fort Chimo indicate that Indians and Eskimo have been fishing in that area since 1850 and that the names of some of the people who are presently living there are the same as those who lived there in nineteenth century. There are arctic char, atlantic salmon, white fish, northern sucker,

brooktrout, a few pike and burbot in the Koksoak and Caniapiscau Rivers. The project will lead to a reduction in the number of these fish. In the upper Caniapiscau River they will be decimated because there will be little or no water or river left. Downstream the effects will be less marked due to the water coming in from the tributaries, but even right into the estuary the effect could be quite marked for the reasons given above. The effects on the salmon will be even more pronounced. Witness then gives in detail the effect which this project will have on salmon in both these rivers and his conclusion is that there will be a severe reduction in the quantity of salmon. Both salmon and char are very important to local people and are very desirable as food sources. Fishing in both these rivers is very important to the Eskimo people, both commercially and for their personal needs.

According to professor SPENCE, a specialist in ecology, limnology and physiology, Fort George Indians obtain a great deal of fish in the area of the first rapids and there is a large bay of water under the first rapids where white fish spawn. The construction of diversion tunnels and closing of the dam will detrimently affect the fish eggs which are very sensitive, and reduce the viability of the spawning area. When LG-2 is completed, the increased flow will change the nature of the sediment and there will therefore be a shifting and a disruption of the spawning bed. When the reservoir is filled, the whole river will be changed and witness doubts that the spawning areas will continue to exist. Sturgeon from Sakami Lake and Fort George River spawn at the rapids at LG-2 which is also a very important area for sturgeon. Other white fish of the same species live in the waters between LG-1 and LG-2. When LG-2 is built most of the rapids at Sakami will be flooded and will no longer be available for sturgeon spawning, and brook trout which are plentiful above LG-2 will no longer have a habitat in that area. The lake trout and white fish which will be available in the reservoir may not be able to reproduce. Any drastic increase or decrease in the flow of the Kanaaupscow River will change the entire character of the river and eliminate fish in that area. The fish may reestablish elsewhere but this is not certain. In any event there

will be a serious problem in reproduction and the fish may take 10 to 15 years to establish themselves. The fluctuation of the water in the reservoirs will mean that salmon, trout and white fish which are shoreline spawners will have difficulty particularly in winter when the shoreline is exposed, and consequently they will suffer very high rate of mortality. 15 miles upstream of LG-3 there is a large population of speckled trout and pike, and also white fish in bay like regions in that area. As a result of the flooding behind LG-3 the speckled trout will probably disappear within a relatively short time. The same will happen at LG-2 and LG-4. Puisseaux Lake has a considerable lake trout and pike population. Close to the rapids there is also a very excellent speckled trout population. The effect of the reservoir upstream of LG-4 will have the same effect as LG-2, that is, there will be less trout and more pike. The trout population will suffer very drastically. In Caniapiscau Lake, salmon will be the main fish that is threatened and will decline in numbers. The drawdown of 40 feet in the Caniapiscau reservoir will have a drastic effect on the salmon and lake trout. The diversion of the Caniapiscau and Delorme Rivers will disrupt movements (which are very important to the survival of some populations) of fish up and down the upper Caniapiscau River into Delorme Lake and possibly from the Lake into the River. The reduction in the flow of the Eastmain River is highly likely to create problems because fish generally do not run up rivers until water levels reach a certain critical point. The 18% reduction in mid-summer, when the water is already low, will be critical. In addition it will affect the spawning areas. The reduction in the flow will delay or possibly even inhibit the run of the fish.

The following are the witnesses who were heard on behalf of respondents on this particular question.

Professor MICHEL, after having spoken at length on the effect of the harnessing of rivers on the conditions of ice in the rivers themselves, in the estuaries, and in the bays, says that salmon always start to migrate after the departure of the ice. But it must not be during the period of flood because salmon will not penetrate into a river during high flood. They await two things: the disap-

pearance of the flood and the disappearance of the ice. His study shows that the ice conditions in Ungava Bay will be unchanged. Salmon will not migrate up the Koksoak river before the month of August when all the ice is gone. Therefore, with respect to migration, the ice which we are speaking about is not river ice but rather bay ice which will remain unchanged and therefore the migration will remain unchanged. A decrease in the flow will decrease the quantity of water required by salmon. There will therefore be less salmon. The spawning beds should be practically unchanged. The decrease in the area covered by water will affect 10 to 20% of the salmon which go into the Koksoak.

LAROCHE, director general of the consortium on water research, says that one should not affirm that a place is a spawning place without having seen fish in the act of spawning. Some fish with very mature eggs may not spawn for weeks and months. If the flow of the Kanaaupscow River is doubled, some spawning areas will be destroyed, but there will perhaps be others which will be produced by the same effect. In cross-examination he admits that, if Lake Caniapiscau is flooded, the spawning beds will be destroyed; that there is a strong risk that the spawning beds along the length of the La Grande River between Lac Puisseaux and lake Caniapiscau will be flooded; that if other spawning beds can establish themselves after the flow of a river has been considerably increased, it can take a certain time before the fish can adapt themselves to find new spawning areas. It can take several seasons, several years before they find suitable places.

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Professor FORTIN, a biologist, speaks at length of his experiences at Manic 5 and I will return to this subject when I examine the proof concerning the reservoirs. This witness in cross-examination admits that the fluctuation in the level of water) have an effect on the spawning beds, for example, if the fluctuation in the level takes place when the interesting species are on the spawning beds you will have problems with the fish. By reducing the flow from 58,000 to 1,000 c.f.s. during a year you risk affecting the spawning beds. First by reducing the area of the spawning bed and secondly in decreasing the oxygen in the water which is necessary to the life of the eggs in the gravel beds. This does not mean that you will completely eliminate them but you will affect them. If the flow is considerably increased and we eliminate the rapids which are places where the fish spawn, we evidently risk affecting the fish in the sense that they will no longer be able to spawn at that place. The preferred habitat of the speckled trout is a river and the spawning areas are usually in the rivers. At page 72 of his testimony the witness states:

R "Si vous changez une rivière en une série de lacs, vous allez nécessairement changer la composition spécifique, la composition des espèces présentes à cet endroit-là. Il va certainement s'établir un autre équilibre après ça, peut-être pas avec les mêmes espèces qui vont dominer. Dû au fait, éventuellement, surtout au fait que vous changez le milieu rivière en milieu lacustre, parce que le problème des frayères existe, on ne peut pas le nier, disons. Si vous les enfouissez sous je ne sais pas combien de pieds d'eau, c'est sûr qu'ils ne pourront plus frayer à ces endroits-là. Ca ne veut pas dire, par exemple, qu'ils ne pourront pas utiliser, remonter plus haut qu'ils ne le faisaient avant dans les tributaires s'ils le faisaient."

Later in his testimony the witness says that it will take time for the fish to re-adjust.

Professor MAGNIN, who specializes in ichtyology and ecology of fresh water, says that fish can co-exist in the same lake occupying different spots. The speckled trout is found in the small tributaries of principal rivers. The increase in the level of Sakami lake resulting from the diversion of waters or the increase in the flow of water going towards La Grande from Opinaca River will not put the sturgeon in danger and this fish can reproduce in the lake itself. In cross-examination he says that the fluctuation of water

at the moment of spawning can cause difficulty; that speckled trout and grey trout can concentrate below rapids; but that if the rapids are destroyed, the trout can always spawn in the small rivers or tributaries of La Grande. Witness says that with the knowledge we presently have he cannot draw any conclusions on the evolution of the aquatic life within the region and adds "Dans l'état actu . de nos connaissances, vraiment pour ne parler que du domaine aquatique, je ne pense pas qu'on puisse donner des affirmations totales et définitives sur tous les impacts écologiques bons ou mauvais qui pourront découler des aménagements de cette région".

7. Birds.

HAROLD HANSON, a wild life biologist, says that the Canada goose, 3 varieties of ducks, the loon and the horned owl are found close to rivers and streams and are hunted by natives for food. Witness indicates on the map, exhibit I-3A, the area in the vicinity of the Caniapiscau basin where Canada geese are very plentiful. Geese will return to the same nesting area every year and if they find it flooded, they will try to find another area and may lose their eggs in the process. Whatever percentage of land is lost in flooding will result in a proportional loss of geese. The richest feeding grounds are where sedges and grasses are adjacent to rivers and lakes. Geese will not use flooded areas nor the peripheral areas for nesting. In so far as ducks are concerned, by flooding rivers you reduce the habitat which the duck has adapted itself to. Although tremendous amounts of geese are killed along the coasts of James Bay, the interior population is the main source of birds.

A witness produced by the respondents, DOUGLAS GILLESPIE, a biologist and member of the Canadian wild life service, after speaking about the migration of geese, concludes that the effects of the project will be minimal as far as the lesser snowgeese are concern . In so far as the Canada goose population is concerned he does not think that the effect would be that great because of the low densities and the spreading out of these birds which number 500,000. In so far as black duck is concerned, the respondent corporation may find itself doing remedial work. If the islands in Lac Bienville are flooded there won't be any black ducks. If the islands remain there will be some in reduced numbers.

The population will be a reduced population but the significance to the total black duck population is rather low. In cross-examination he states that the Caniapiscau, Delorme and Bienville areas are feeding as well as staging areas for waterfowl, and the headwaters of Caniapiscau have a large population of birds.

8. Wetland habitat & shoreline vegetation.

Professor HARE says that wetland vegetation exists along the La Grande River, especially where the river is relatively quiet and slow moving, and along the shorelines of lakes and rivers in the area.

Professor GILL states that in an northern environment the larger the river, the more significant and important are the alluvial habitats along its shores. This is due to a greater flood stage. Animals therefore have a better food base along northern river systems because the land adjacent thereto is more highly productive. The impoundment of an area will flood the alluvial habitat and it will take a number of years for the wetland habitat to re-establish itself.

COOK defines wetland habitat as vegetation which consists of alders, willows and herbaceous vegetation adjacent to a waterbody. It is the most productive habitat for animals and a great number depend on it. On the lower La Grande River at LG-1, LG-2, and LG-3 a very large percentage of wetland habitat adjacent to the rivers and lakes will be lost. Fur bearing animals such as beaver and muskrat depend on this habitat and it is therefore a critical habitat for animals which Indians trap. The most important wetland habitat region is the lower La Grande area which is the stretch of territory from Fort George settlement beyond the confluence of the La Grande and the Kanaaupscow River back to the rear of the Forebay LG-3 as well as the area between Fort George River and the Eastmain River going south. This is the critical region. The spillway route consists of shrubs and woodland. There is a small stream in the area and one or two small lakes around which there are specific wetland habitats. The Sakami lake is the major area for wetland habitat. The increased flow will result in increased erosion of

banks damaging the wetland habitat adjacent thereto and a new wetland habitat will not be re-established along the Sakami Lake area. A decreased flow in the Great Whale River and Opinaca River will result in a drying out of the shoreline and the wetland habitat will be damaged. Wetland habitats have existed in a natural state for a long period of time, are very small in relation to the general total of vegetation and very specific along rivers. If you lose such a resource, animals will have to go elsewhere to find nourishment and since the carrying capacity of the land is limited, witness does not believe that they can go anywhere else to find food which is not taken up by other animals. The wetland habitat in the areas other than the Caniapiscau area and along the La Grande River are limited in area and are inhabited by a sufficient number of animals. If therefore you eradicate a certain amount of wetland habitat, the animals going to these wetland habitats, if they actually get there, will be in direct competition with animals already present and then the natural mechanisms of nature such as predation, disease and starvation will come into effect and you will get a reduction in populations and a change in general distribution of animal populations in the area. In addition the wetland habitat becomes more limited the further north one goes, because vegetation takes a long time to grow in such areas. You cannot properly manage such wetland habitat and insofar as regeneration is concerned, it may not occur at all, depending on the moisture of the soil and if it does occur it may take from 70 to 150 years.

Professor FENTON says that an increased flow may destroy the wetland habitat and the animals will be displaced and will die. According to professor SPENCE 80 to 90% of the total shoreline of La Grande is viable wetland habitat. The area from Fort George to LG-2 is continuous wetland habitat and Sakami River is similar.

Witnesses on behalf of respondents made the statements which follow. The wetland habitats along river banks will be the first areas to be flooded (Wiebe). Rich vegetation is found in part along river banks; wetland habitat is found along La Grande River between Fort George and LG-2; the area along river banks is generally

speaking the most favorable for vegetation; regeneration in the territory is very slow (Lachance).

JURDANT, a research worker and a forest specialist, speaks of 3 kinds of wetland habitat adding that the wetland vegetation along rivers is the richest and that along lakes the second richest. It can also be found in seepage areas which are caused by the accumulation of water which he calls valley wetland. At page 22 of his testimony in reply to a question concerning the effect of the reduction in the flow of rivers like the Caniapiscau or Great Whale he gives the following response:

> "La réduction du débit non accompagnée par des crues, par des zones de crues, va évidemment affecter les, tous les "wet-lands" qui se trouvent à fleur d'eau, ça c'est évident; heu, qui se trouvent à fleur d'eau du courant du, de la rivière principale."

On the following page he says in speaking of La Grande River: "Tous les "wet-lands" qui se trouvent au niveau de la rivière et qui sont conditionnés par ces crues vont être détruits. Mais, tous les autres ne le seront pas." He adds that the valley wetland habitat will not be affected. In speaking of the 4 reservoirs LG-1, LG-2, LG-3 and LG-4 he admits that the wetland habitat will be destroyed and that it will take a minimum of 30 years for it to re-establish itself. In cross-examination he says that a rich wetland can sustain a richer and a greater variety of fauna. He admits that as a result of the project all the wetland habitat downstream from the reservoirs will be dried out.

9. Lichen.

Professor HARE describes the plant which is called lichen and files as exhibit P-19, 4 photos showing areas in the territory where lichen is present. Lichen exists in the center of the peninsula extending in an area of approximately 160,000 square miles. The area around LG-4 is well within the lichen woodland zone. LG-3 is the zone where some of the lichens are replaced by extensive shrubs and around LG-1 and LG-2, where the valley is narrow,

the area of lichen cover is reduced. Sakami Lake is in the shrub woodland zone where lichen areas are not as extensive as elsewhere. Lake Bienville and Lake Caniapiscau are in the middle of the lichen woodland area. Lichen grows very slowly, taking decades to develop. Mammals, both small and large, forage lichen in winter mainly. It is a staple source of the diet of mammals when the ground is snow covered and other vegetation is dormant. In the Delorme-Caniapiscau area caribou feed on lichen. As stated above the flooding of areas which are critical to the caribou will have adverse results on this animal.

TANNER states that caribou live on lichen.

According to COOK, flooding will reduce the lichen woodland vegetation in the upper La Grande area, that is, in the Caniapiscau, Delorme, Bienville and Puisseaux reservoir areas, by 70 to 80%. Since the Caniapiscau-Delorme area is a critical area for woodland caribou which feed on lichen, the effect on this animal will be serious.

JURDANT confirms that the areas mentioned by professor Hare are ideal lichen woodland areas. In referring to the testimony of Cook he says that it is very difficult to place a percentage on the area that would be lost as a result of the flooding. In cross-examination he confirms that a great area of lichen woodland will be affected by the flooding of the Caniapiscau reservoir.

LACHANCE says that in the process of re-construction of a forest, lichen is the first plant that will install itself. The regeneration process within the territory is very slow.

MOISAN in cross-examination confirms that caribou is more abundant in the Delorme-Caniapiscau region because lichen is more propitious in that area and caribou depends on lichen.

10. <u>Rivers, sediment & erosion</u>.

The evidence on these 3 particular subjects is inter-woven and it is therefore preferable that I deal with these subjects at one and the same time.

I have already pointed out that professor K[illegible] HALS, a specialist in river engineering, hydrology and geology, says that

as a result of the project the La Grande River will be carrying 80% more water, the spring flood will be somewhat reduced, and during most of the year the flow will be considerably higher than it is in its natural condition. According to the witness there will be some adverse effects during the construction. Materials dumped in the river will block the course of the river and increase siltation. Oil from machinery will leak into the water. After the dam is built, it will take a year to fill the reservoir. During this period the flow will be cut off and the river at the estuary will be reduced to a trickle. Salt water therefore will intrude to a much greater extent. Fresh water plants will not be able to survive and vegetation and the animals generally will suffer. After this period is terminated, the regulated flow of the river will commence. The effects of the La Grande River after the project has been completed will be as follows:

1.- The silt and gravel which was previously carried down from upstream will be retained behind the dams because it will not be able to pass through the reservoirs.

2.- The water going through the dam will be free of sediment and will be subject to chemical and temperature changes which are hard to predict.

3.- Where it flows on sand it will pick up sand from the river and transport it towards the estuary and, therefore, the bed of the river will be lowered.

4.- The banks will be eroded and larger banks will be formed until the river reaches an equilibrium adjusted to the new regime.

5.- In the estuary there will be a shifting of the main channels and increased erosion of the island.

6.- The salinity at any given place in the estuary will be quite different from what it is now.

Professor KELIERHALS then speaks of the effect which the diversion of the rivers will have. The drainage basin for the Great Whale River will be reduced and therefore the flow of the river will be correspondingly reduced. The river along its channel will tend to become smaller and vegetation will grow on what is now part of the riverbed. The tributaries which are presently bringing

material into the river will have a lessened capacity to move that material so that deposits will build up at the mouth of the tributaries. The effects of salinity will be similar to those which were discussed on the La Grande in the sense that lesser fresh water ll allow the salt water to come in further into the estuary changing the conditions of salinity. Since however there is a spillway provided for any diversion structure, the adjustment of the river will not be permanent and, from time to time, the river will be returned to its present flow and the adjustment will be thrown off balance again. Trees and vegetation which have begun to grow will again be eroded. In the Kanaaupscow River the flow will be increased tremendously upstream near the point of diversion and will have the same effect as the spillway at LG-2, tremendous erosion so that the river may take a new course, the eroded material will flow into the reservoir at LG-2. What is now the Kanaaupscow River will eventually disappear in the upper part and the valley will be unrecognizable after the diversion. In the lower parts there will be increased bank erosion, and trees, blueberry bushes and vegetation will be flooded. The Caniapiscau River will be re-routed into the Puisseaux Reservoir and into the La Grande system behind LG-4. This diversion will cut off more than a hundred miles of the southern part of the Caniapiscau basin. The breakup of ice all along the river will be retarded because the increase in discharge has a great effect on break up. This will delay the break up from one to three weeks. The banks of the Caniapiscau and Koksoak River will become smaller. The effects will be the same as the Great Whale River. It will delay navigation and reduce the depths. In the area through which the waters of Lake Caniapiscau will be forced into the Puisseaux reservoir, the effects will be the same as on the Kanaaupscow River. Near the diversion structures the effects will be very spectacular because large quantities of water will be released. The same effects will occur by the diversion of the Opinaca River through Lake Sakami.

Mr. TAYLOR gives the description of the effects which the project will have on various rivers. The flow of the lower La Grande River will change considerably. For a period of one year during the construction of LG-2, the flow will be cut off completely

and from 60,000 c.f.s. the flow will trickle down to 1,200 c.f.s. and this latter flow will be due to water supplied from tributaries. The river bed will be exposed and the sediment of the tributaries will remain in the bed of the river. The salinity at the mouth of river will be increased for a distance of 8 miles upstream making the water supply more saline. After completion of LG-2 the water flow will be increased resulting in less salinity. After construction the mean annual flow will be increased by 70 to 75% and the present maxima and minima will be reversed. This results not from the stabilization of the flow but because it is created by damming the river and forming a power pool. The water in the reservoir loses its capacity to transport sediments which will settle in the reservoir, and the water coming through the turbines will be clear. In order that a river remain stable the erosion and sediment must offset one another. The river will try to regain its sediment and its equilibrium. It will lower its bed and erode its channel banks. Where the bottom is bedrock there will not be much change but where there is sand it will erode fast; with clay the erosion will be more gradual. Below LG-1 the banks are sand. The banks of the island of Fort George, being sand and clay, will be eroded on the upstream side. The vegetation along the shores will also be affected. The river itself will cease to be a river. Taylor then speaks of the Great Whale River. The drainage basin of this river will be diverted along the Kanaaupscow River into La Grande. The mean annual flow at the mouth will decrease by 53% according to the report of the Respondent Engineers and 30% according to this witness. The flow decrease will increase as we go upstream. The effect of this change will be that the river will become smaller, narrower, less deep and steeper. The sediment brought in by tributaries will be deposited in the existing channel of the river. The added siltation will make the river less deep, there will be less water and consequently navigability will be affected. The decrease of the flow of fresh water at the mouth will increase the salinity. Although the river will attempt to adjust to the new situation, this process will be disturbed when water from the Bienville Reservoir is spilled back into the Great Whale River which will occur whenever climatic

conditions result in additional supplies of water too great for the reservoir to store. The flow of the Kanaaupscow River will be increased by 135% which is more than two times the present flow. At the diversion point the increase is infinitely greater because at present, at this particular point, it is a small stream. The present drainage area is 100 to 200 square miles. In the upper regions there will be incredible scouring, the riverbed will be lowered, the river will become wider and erosion of the banks will take place removing soil, vegetation, shrubs and trees about 100 feet on either side of the river. The vegetation and overburden will be carried into the Forebay of LG-2. The Opinaca River drainage basin will be diverted through Sakami Lake into La Grande River. The flow at the mouth of the Eastmain River will be reduced by 19%; where the Opinaca joins the Eastmain its flow will be reduced by 80%. Opinaca will become a different river with effects similar to the Great Whale River, siltation, less water, etc. The dams will permit water stored in Lake Opinaca to be sent back into Opinaca River whenever there is too much water with effects similar to what will occur at the Kanaaupscow River, that is the flushing out of sedimentation, erosion of vegetation and so forth. With respect to Lake Sakami the diverted water will create a larger channel from Lake Opinaca until it reaches Lake Sakami causing erosion of the type mentioned by the witness above. The ground surface will be lowered and the banks of the river will be eroded to form a larger channel. Material carried by the water will be deposited in Lake Sakami. The witness next speaks of the Caniapiscau River which in its lower portion is called the Koksoak River. The mean and annual discharge at the mouth of the Koksoak River will be reduced by 28% (the figure submitted by respondents in exhibit P-46 is 31.5%). At Granite Falls (one hundred miles downstream from the diversion point of Delorme Reservoir) the flow will be reduced by 78%; at the diversion point the reduction will be approaching 100%; at the junction of the Larch and Caniapiscau Rivers the reduction will be 50%. Between the junction of the Larch and the diversion point at the lake the Caniapiscau River will be reduced, the channel will have to adjust to siltation, there will be a dry river channel, the tributaries will be continuing to supply their normal sediment, but the

river will lose a considerable amount of its transporting ability and will become narrower and shallower. This will occur at the junction of these two rivers and all the way into Ungava Bay. In the estuary, the salinity will increase and will go further up the river. There will be less ice in the winter and the spring flood will be delayed. What is presently the Caniapiscau River will in effect become a spillway for the system. There is provision for the rediversion of excess water following an unusually high snow accumulation in the spring or a high rain fall in the summer, that is, the excess water will be sent back down the original drainage channel. This will cause erosion of the banks, and the removal of sediment and vegetation along the river channel. The area between Lake Caniapiscau and the Puisseaux Reservoir is presently not really a river channel at all but it will become so as a result of the diversion and the effects which the witness said will occur on the Kanaaupscow River and the area above Sakami Lake will also occur here. The construction of diversion tunnels in 1973 will result in increased sediment in the lower La Grande. Road construction over the tributaries will make the land more susceptible to erosion which will be carried into the river. The present systematic wetting and drying will no longer occur and will cause a change in the vegetation.

As seen above, Professor GILL says that one of the effects of removing the flood stage is that there is no longer any sediment being laid down every spring and he describes the adverse effects that this will have on the animal habitat. In speaking of diversions he says that the most traumatic damage that can be done to a river is to block it off and to divert the water. Damage of different kinds will occur on rivers which are dammed for hydropower. In hydroelectric development you have to maintain some semblance of the annual amount of flow except that the regime is changed greatly whereas obviously in rivers that are dammed for water export or diversion the flow is reduced so greatly that the former river system cannot exist. I have already referred to the testimony of this witness concerning experiences in the Peace-Athabasca delta in north-eastern Alberta. His remarks concerning erosion are not

applicable to a river flowing through precambrian terrain because the material erodes very slowly. His remarks refer to pockets of material such as glacial till and any alluvial material along the river that is supported on top of the precambrian material.

COOK says the increased flow will result in increased erosion of banks and a new wetland habitat will not be re-established along the Sakami Lake area. The decreased flow in the Great Whale and the Opinaca Rivers will result in a drying out of the shoreline and the wetland habitat will be damaged. When water is spilled into these rivers there will be erosion and the new vegetation will be damaged.

PENN, a doctoral candidate in geography, says the La Grande River will have an increased capacity to pick up and transport suspended sediment because of the increase in the regulated flow. For most of the year the discharge will be significantly higher and we can expect that the transport of suspended sediment will be correspondingly higher. There will be less sediment in the water actually leaving the impounded area because the sediment from further up the river will remain in the impounded area, but the suspended sediment will be higher further downstream. This would be an advantage if there are sufficient nutrients in the suspended sediment carried out to sea, but it may not supply the same amount of nutrients that are presently being carried into the Bay. It will of course affect the drinking water because Fort George is on an island and it will be difficult for them to find an alternative supply of water.

Several witnesses testified on behalf of respondents.

MURPHY, a geological engineer, produced maps and photographs of the area to show rock control structures in the rivers and lakes. He gives a description of the areas which consist in part of rock control, glacial sediment, till, gravel and boulders, and clay. In speaking of the effects of the project he says that, downstream of LG-2, erosion will take place at an accelerated rate for a short period of time but it will stabilize. Upstream of LG-2 there will be very little change from the situation which presently exists. There are a few local areas where erosion is currently in

progress and this will continue. The Puisseaux, Caniapiscau and Bienville regions will not change. In the diversion channels between these areas where the flow is increased some local increase of erosion will take place, but the situation will stabilize fairly rapidly. According to the witness such a stabilization will take place in a few years or less. In the Kanaaupscow region there are one or two zones where erosion will take place. In cross-examination he says that, at LG-1 and at LG-2, there are marine clay deposits which at LG-1 penetrate up to 128 feet and at LG-2 up 80 feet, the majority at LG-2 being 30 feet deep. These materials are very sensitive. Upstream of LG-1 and LG-2 for a distance of 40 miles there is evidence of unstable slopes and sloughing of bank material. By increasing the water flow 77% down the river the effect would be the same as a flood that may occur in the spring. There is a tendency for undercutting of the banks and for local landslides to develop. If you maintain that same peak flood level, the tendency will be for a new equilibrium to be established within a period of 10 years. The island on which the settlement of Fort George is located is primarily sand, which is erodable material. Below LG-2, the erosion will be accelerated until LG-1 is constructed. In many places the river has to pass through rock control structures. The banks of the river are relatively insensitive to what is going on today. Witness speaks of the effect of the diversion of the Great Whale River; for the first 30 or 40 miles, the terrain over which it flows consists of a lowland area and the soil deposits are primarily glacial including moraine, sand, and gravel. There will be erosion in this area, but then you reach a rock control area which forms a natural sill. The sediment will deposit in the lake which is located at this point, and then the river falls through a canyon for a distance of another 30 or 40 miles. The sediment along the banks could be eroded and will be carried through that particular region and deposited in the upper part of LG-2 Reservoir.

LEVAY, a geological engineer, also gives a description of the land forms. His testimony can best be summarized by the following statement which he makes:

"In the diversion areas, we have for instance the Delorme-Bienville diversion, there is 150 miles of diversion. We have noted in our photogeology that 100 miles of the present channel is mainly bedrock and the last 50 miles is mainly moraine. In the moraine, approximately 50% of the channels are narrowings, narrows in the river course are bedrock controlled. In the Bienville-La Grande diversion, there is approximately 130 miles of diversion. The first 80 miles is through moraine the channel then goes through 10 miles of a rock canyon and then the remaining 40 miles is in a large moraine and alluvial terrace region. In the Caniapiscau-Puisseaux diversion, there is 80 miles of diversion which is mainly all rock controlled. The Puisseaux-LG-4 diversion, there is 140 miles of diversion approximately, 55 miles are mainly rock, the next 40 miles are mainly moraine and the last 50 miles is mainly rock. I would indicate, I would like to perhaps clarify what we mean by when we say rock, it's not all rock. I would say here, for instance we have, the red is shown is rock, the red is shown as rock or moraine over rock, which means that the moraine is thin and we have rock outcrops in the moraine. So, we classify that as rock plus MO moraine on rock. The other regions where we have..."

The witness goes on to say that, in the regions he just spoke about, there will be some erosion.

WIEBE, a specialist in hydraulics and hydrology, discusses the hydrological changes which will occur as a result of the project. He files certain exhibits to show the potential flows of the rivers between 1962 and 1971, and in so far as La Grande is concerned extending this period by correlation to create a synthetic period of 37 years. After development, the variation of flows will be considerably reduced and will lie entirely within the range of natural flows within an average year. With respect to the Eastmain the amount of diverted water is small. With respect to the Great Whale River a large portion of water is diverted but the basic character of the flow remains the same, and in the Caniapiscau River, the flows are considerably higher than the other two, but the hydrological and hydraulic effects will be minor. The many lakes outside the limits of the proposed reservoirs and channels linking the reservoirs and forebays in 95% of the drainage basin will not have any change in water levels. The fluctuations will take place in the reservoirs, the connecting channels, and the forebays which comprise 5% of the area. Witness then gives details concerning the fluctuations within the various reservoirs, and the effect of a reservoir in reducing the size of major floods. According to this witness the existing capa-

city of the forebay with power facilities is sufficient to handle any floods during any 45 year period. The complex will reduce peak floods. The witness then makes the following comments concerning the sediments which will be carried by the flow of water in the fferent rivers and lakes. In the route passing from Delorme reservoir to Lake Bienville there will be only minor erosion. Very little sediment will be carried by the water flowing from Bienville reservoir along the Caniapiscau River to LG-2. More rapid scour will occur in the 40 mile segment in the lower reach of the Kanaaupscow River. Very little erosion will take place from Caniapiscau reservoir to Puisseaux reservoir where there is a long series of interconnecting lakes with rock controls. From Puisséaux to LG-4 the sand which will be eroded will be carried through and deposited in the forebay of LG-4 but this is no different than what exists in the natural river at the present time. On La Grande minor amounts of material will pass from one reservoir to another. In the Opinaca basin there will be a possibility of minor erosion between Boyd Lake and Sakami Lake, but any erosion will deposit in Lake Sakami. There will be no significant change in the equilibrium of the Great Whale River because it is rock controlled. Any sediment carried down the Caniapiscau River will be deposited in Cambrian Lake. There will be very minor changes in the actual equilibrium conditions of the Koksoak at the lower end of the system. The cross-examination of this witness reveals that the project will result in many adverse effects. It will be impossible for vegetation to re-establish itself for many many years in the flooded area. The reduction in the flow of the Great Whale River could lead to problems other than erosion and at the estuary the salinity problem will be increased. Flooding will result in uprooting of shrubs, trees, and grass in the ...rrow connections between the lakes, but this floating debris will be caught up on the sides of the lakes downstream. Large stretches of the La Grande River will be turned from a river into a series of lakes. Below LG-4 the river will probably stay completely unchanged, except that it will be flooded. Flooding will cause some effects in addition to erosion, particularly on vegetation which is flooded.

The erosion between Opinaca and Sakami Lake will take place over an area approximately 3 miles long and 200 feet wide. In the area around the upper Kanaaupscow River islands will be flooded by the new volume of water. Witness admits that the velocity of water will increase with the increase in the water level at areas of rock control or where there are boulders in the water. The velocity of the water will be increased in the rock controlled areas between Delorme and Bienville reservoirs and between Puisseaux reservoir and the forebay of LG-4 along the La Grande River. According to the witness an increase in the velocity of water will increase erosion. The flow will also be increased along the Kanaaupscow River between the diversion point of Bienville reservoir and the forebay of LG-2. Some of the banks of the low-lying areas will be flooded and certain sections of some of these rivers will overflow their banks. In the lower Kanaaupscow River there will be some spilling onto the riverbanks. The complex is designed exclusively for hydroelectric purposes to get the maximum hydroelectric potential out of that water.

FRENETTE, a specialist in harnessing rivers, says the project will increase the volume of water in the La Grande by 75 to 80% but will eliminate floods and regularize the flow. The increase in the flow will not have a very great influence on the quantity of sediment. When LG-1 is built all danger of erosion above LG-1 will be eliminated. There will be very little erosion in the bed or banks of the river. In cross-examination witness admits that there are no preliminary plans envisaged to regularize or avoid erosion. The object of the present plans is to create a hydroelectric scheme. They were not made with a view of stabilizing a river. It is only during the course of construction that modifications will be made. When the La Grande River is closed to permit the construction of LG-2, the flow will be reduced to 1,200 c.f.s. and there will necessarily be a re-adjustment in the slope of the river and it is possible that sediment will be transported until such time as a new equilibrium is established. If the river bed is fine sand the readjustment will be made within several weeks, but if it is made up of a material which is more difficult to erode, it could take from 1 to 2 years.

LAMONTAGNE, director of the service of water quality, in speaking of the variation in the flow of the water in rivers and the diversion of rivers says:

> "En suivant la variation du débit, évidemment, là je ne connais pas, mais il est normal du moins que si vous avez une végétation aquatique, où qu'elle soit, et que vous enlevez l'eau, elle meurt. Ça, je pense, on est d'accord sur ça. Et elle est remplacée, à long terme, par une végétation terrestre."

To establish this new equilibrium would take from 0 to 10 years.

Later in his testimony he makes the following statement:

> "Bien en fait, normalement lorsque vous mêlez des rivières de qualité différente, évidemment vous avez une nouvelle qualité qui s'établit. Si vous apportez à une eau très forte en éléments.. n'importe, évidemment si vous apportez des eaux plus diluées dans certains éléments, ça apporte un aspect de dilution. Si vous apportez des eaux plus concentrées, ça reconcentre les eaux. En fait c'est un nouvel équilibre qui se rétablit."

In speaking of the consequences of mixing waters he says that this will depend on the quality of the rivers which are mixed together. In cross-examination he says that as soon as you touch an ecological system, regardless of what you do to it, you will change its equilibrium. The change of the flow of rivers will evidently have an effect on the fauna, the flora and the quality of water. Reducing the flow of a river will change the quality of the water.

MANSFIELD confirms that a change in the flow of the Great Whale River of approximately 40% would have an effect upon the estuarine current and upon the sea vegetation in the estuary of the river.

In cross-examination SEGUIN admits that doubling the flow of a river will produce a different milieu which will have different conditions. Specifically the reduction of the flow from 58,000 to 1,000 f.p.s. will lead to modifications in the river which will result in changes in the kinds of fish and in their population. It is very difficult to predict the consequences of a decrease or an increase immediately following the construction of the reservoirs without knowing many factors.

DUMOUCHEL, a biologist, in cross-examination says that a certain quantity of sediment can cause problems to fish spawning areas.

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11. Reservoirs & impoundment.

Professor HARE states that animal and plant life within a lake will be different as a result of the creation of new reservoirs.

Professor GILL in speaking of the downstream ecological effects of river impoundment says that once a dam is completed there are many and long reaching effects not only within the impoundment itself, that is, not only within the area flooded, but along the entire river system below the dam. Witness refers to the Bennett dam in the Peace-Athabaska Delta in north-eastern Alberta. The reduction of the flow in water had very immediate and very profound environmental and ecological effects. The delta lakes are very shallow by their very nature but have been adapted to by a wide ranging number of organisms. Muskrats, for example, need a very precise water level. Studies have shown that muskrats do best in shallow water bodies a little over one meter in depth. Any variation in this depth has negative effects on the muskrats. If the water is deeper, it does not provide sufficient aquatic vegetation to sustain the muskrats' feeding activities, and if the water is shallower it is not sufficient to protect them from the winter cold. In the Peace-Athabaska Delta the lowering of the water level for a couple of years caused the muskrats to be winterkilled. Prior to the closure of the Bennett dam, the annual productivity was about 44,000 muskrats. After the closure of the dam, only 3,300 were harvested and this has been attributed to the reduction in flow below the Bennett dam. In so far as buffalo or bison is concerned, as soon as Bennett dam was completed replacement of new alluvium no longer took place. Plant succession immediately began to occur and the particular species of sedge was replaced very rapidly by less palatable, less good, in terms of buffalo feed, species of grass. What the witness mentioned about muskrats is also applicable to waterfowl, geese, and ducks. The maintainance of vegetation depends upon the continued replacement of nutrients during the flood stage, and upon the continued deposition of sediment, again during the flood stage, and as soon as the flood was not there because of

closure of the dam the aquatic vegetation suffered, and the food base for the waterfowl suffered accordingly. It displaced many, many waterfowl and made it impossible for an unknown number of them to reproduce properly. For the same reason the food base of beaver is reduced and the beaver suffer. The perpetuation of beaver numbers is not assured. The above is applicable to virtually every animal that occupies flooded plains.

PENN says vegetation decomposing in the newly created impoundments will have certain detrimental effects on the water quality of the lakes, and the most conspicuous is the removal of dissolved oxygen which would take place over a period of 5 to 10 years. The effects would probably be noticed over a period of 2 or 3 decades. In late winter the bottom of the lakes would probably contain very little dissolved oxygen which is necessary to fish life, and there is a possibility that shallow and very stagnant water in late summer would warm up and lose the necessary oxygen to support fish life as well. The increase of nutrients in the water would not necessarily benefit the fish, because they would take up dissolved oxygen and generally maintain the water in a condition unsuitable for fish. Nitrogen supersaturation occuring in the tail-race below turbines will cause gas bubbles to be formed in the water and will cause blindness, loss of balance, and suffocation. It has caused extensive death amongst chinook and sockeye salmon. On the Columbia River in Oregon 20,000 chinook salmon were lost in this way. This occurs immediately downstream from a dam. This will be a particular problem in the case of LG-2 where there is a very considerable head of water.

COOK states that the greatest amount of lakebed exposed by drawdown of water will occur around the reservoirs. It can run from half a mile to about 7½ miles in width in circular form all around the lake. In winter it will cause exposure of the lodges of beaver and denning animals above the levels of the lake. This will cause death to the beaver which requires its den to be underwater as an insulation factor in winter. In summer there will be rings around the lakes which will cause decay and restrict the use of the reservoirs. As a result of the floodings the small lakes will

disappear, and there will be an overall reduction of shore-line. The original shore-line vegetation will be destroyed and the only plants which will grow are those which can survive periodic inundation. Animals which depend on shore-line vegetation will not have anything to eat and will die or move to a new area where they will have to enter into competition with the animals which are presently there. The rate at which the new vegetation will regenerate around the lake will be very slow.

Several witnesses testified on behalf of respondents concerning the effects resulting from the creation of reservoirs and the impoundment of water.

LAMONTAGNE states that he has never seen large quantities of dead fish at the bottom of heads of water. In increasing the surface of water the heat in the water is increased and consequently the quantity of algae will be increased. The nutritional food in a lake is principally found in the upper part which receives the sun.

Professor JONES, a chemist, in order to show that the decomposition within a reservoir is very slow, filed as exhibit I-121 a piece of wood which remained submerged in the Gouin reservoir since 1913. The tree from which this piece of wood was taken was 40 years old when it was submerged and its appearance is still healthy. A sample of water was taken at the same depth and is very well oxygenated. Further analysis was carried out in the Manicouagan reservoir at various depths and the water was found to be well oxygenated.

ARMAND ROUSSEAU a biologist never saw any fish suffering from nitrogen disease.

PERRIER a meteorologist says that the meteorological and climatic changes resulting from the creation of reservoirs within the territory are very small and confined to a small belt of land around the lakes and reservoirs which will not exceed 15 miles.

OSTROFSKY, a consultant biologist, files several documents showing the quality of water in reservoirs at Churchill Falls. Witness carried out a series of physical and chemical tests of the quality of the water at 18 different stations, some of which were

in the Ossokmanuan reservoir which has been in operation 10 years, some in the Smallwood reservoir the impoundment of which was commenced in April 1971 and will be completed in 1973, and others in lakes which are in their natural condition. The differences are not significant. He says that the water qualities of La Grande River, Opinaca River, Grande Baleine River, and Caniapiscau River are similar to those at Churchill. At Churchill Falls, as a result of the flooding, there will be no significant change in the quality of water. He has never seen dead fish at the tailrace of reservoirs.

LAROCHE states that he has never seen the phenomenon called supersaturation. It can happen within the territory, but to a much lesser degree than in the temperate regions. If it happens close to the rapids the situation will stabilize itself quickly.

FORTIN established sampling stations at Manic 5 and found different kinds of fish, all of which were in excellent condition. The rate of capture of fish in Manic 5, compared to natural lakes such as Lac Mistassini, is approximately the same. It is quite possible he says that the initial spawning areas were buried in 500 feet of water 8 years ago but the tests carried out by the witness last year show that the fish adapted itself to the new situation within a relatively short period of time, that is, within 8 years. Before deciding whether grey trout could be transferred to a reservoir like Manic 5, certain studies would have to take place. The oxygen in Manic 5, Lac Sainte-Anne, and Baskatong reservoir is satisfactory. In cross-examination he admits that in one of the lakes, which presently forms part of Manic 5 reservoir, the ouananiche previously existed in great quantity, but that when he fished there last year, none were found. The best places for the fish that the witness mentioned are near the tributaries of rivers which flow into the lakes in areas which are not deep. At Manic 5, in raising the level of the lake, the rainbow trout population will be forced to go up the tributaries, and if spawning sites exist at those places the flooding will affect them.

MAGNIN says that the information which is available from Manic 5 reservoirs and the other reservoirs located in an area of approximately the same latitude are a good indication of what

will happen in reservoirs within the territory. In cross-examination he admits that the project will have good and bad effects. He adds that with the knowledge available presently, he cannot draw any conclusions on the evolution of the aquatic life in the region.

SEGUIN, a biologist, also states that the information obtained from Manic is applicable to the James Bay area. The quantity of fish in a particular area of water is not dependent on the quantity of water but rather on the quality of the water. Fish will continue to propagate and their survival will be assured as long as favourable conditions exist. In the James Bay reservoirs one can expect that the majority of the species will continue to live and will propagate themselves, but at different degrees from one species to another by comparison to what exists presently, the milieu becoming different. In cross-examination he says that the flooding between LG-1 and Puisseaux Lake will modify the spawning areas and the fish will be obliged in the majority of cases to find other ideal places to spawn. It will take up to 10 years for the fish population to re-establish itself. The literature mentions certain reservoirs where there was a substantial decrease of certain fish. It is very difficult to foretell whether there will be an increase or decrease immediately following the construction of dams without knowing many factors. Different populations can result from different conditions. Eventually there will be an increase in the total production of fish, but he cannot say that it will arrive immediately after the construction of the dams without having precise information.

DUMOUCHEL, also a biologist, says that experience in Russia has shown that the flora and fauna will change as a result of the construction of dams but generally speaking the bio-mass of both will increase. The fauna is modified in the sense that the river species will be replaced by lake species. Such an increase in the bio-mass will however take approximately a year. The effect which the fluctuation of water level will have depends on the time limit within which such fluctuations take place. If there is fluctuation of 30 feet in 3 weeks, the damage will be irreparable. If

the period is 4 to 5 months the effect will not be advantagous, but if the period is extended to 1 or 2 years, there will be a continual replacement of the "faune benthique".

Several witnesses testified that the decomposition of trees within a reservoir will have adverse effects on productivity within the reservoir by affecting the water chemistry and the nutrients (Gill, Penn, Kellerhals, and Cook). In so far as the effect which standing timber will have on navigation and recreational use of reservoirs, I am satisfied with the explanation given by the many witnesses (produced by respondents) who said they were able to make use of other reservoirs notwithstanding such timber.

In an effort to show that the construction of reservoirs will not have an adverse effect on aquatic life and on the animals in the immediate vicinity thereof, and that the fluctuation of the reservoirs would not create ice problems, respondents produced many witnesses who told of their experiences at other reservoirs in the Province. Amongst these witnesses are Duguay, Bourassa, Paquin, Charest, Morrissette, Pelletier, Labossière, Brochu, Beaudoin, Carle, Beaulieu, Ingram, Rancourt, De Courval, Dancoste, and Martel. These witnesses testified to the effect that they were successful in taking fish from these other reservoirs, that they saw many animals in the vicinity, and that when the level of the ice dropped due to the fluctuation of water within the reservoir it did not prevent animals from acceding to the banks. Respondents pretend that the same thing will happen to the reservoirs which will be constructed within the territory.

This argument in so far as fish are concerned is not totally valid when one considers the date of construction of these other reservoirs, the date when the experiences of the witnesses took place, and the difficulties which some experienced in finding fish. Exhibit I-113 gives the date of construction of each of the reservoirs therein mentioned. Witnesses give the dates of construction of the remaining reservoirs mentioned by them. The dates are as follows: Reservoir Lac Sainte-Anne 1957, Reservoir Lac Cassé 1957, Dams A, B and C on Manouane River 1900, 1911 and 1910 respectively, Cabonga 1929, Baskatong 1927, Dozois 1949, Gouin

1913, Bersimis 1957, Outarde 4 2 April 1968, St. Cinconcine in the 19th century and rebuilt to its present hight in 1942, Manic 5 1964, Lac Ossokmanouane 1964, Rapide 7 1941, Rapide 2 1954 and Matawin 1930. The proof shows that fish were taken in all these reservoirs. However it is important to note that in the case of the majority of these witnesses the fishingexperiences took place many years after the reservoirs were constructed. For example Bourassa relates his experiences during the last 12 years, yet the reservoir was created in 1903. Paquin fished from 1954 to 1972 in Cabonga, Baskatong and Gouin which were created many, many years ago. He started to fish in Dozois 5 years after its creation. De Courval who fished in the Outarde River before the flooding and in the reservoir immediately following its creation says that the river was not favorable for pike prior to flooding, but that subsequently there was a great deal of pike numbering perhaps millions. In this he corroborates the evidence of witnesses produced by petitioners to the effect that the creation of reservoirs is favorable to pike which is a carnivorous fish. Duguay fished in Lac Sainte-Anne 3 or 4 times before the flooding and he returned in 1960, 3 years after the flooding and it was still a good place for fishing. With respect to the spawning areas he made the following comments:

R "Non. Après l'inondation, il y a eu une perturbation où on avait de la misère à retrouver le poisson en grandes quantités, il semblait disséminé ici et là, puis on n'avait plus de points de repère pour trouver la préférence des poissons dans leur nouvel habitat.

Q Pendant combien de temps ça a duré?

R Mais ça a duré d'une façon marquée deux ans. Après ça, c'est allé en s'amenuisant, et puis aujourd'hui bien, on va, on sait où aller directement pour prendre de la grosse truite, de la moyenne truite ou de la petite truite.

Q Les endroits de frai ont-ils changé ?

R Oui, ils ont changé . Ils ont remonté, d'une façon générale, ils se sont dirigés vers les nouveaux estuaires des affluents qui ont éloigné, à cause de l'inondation."

With respect to reservoir Lac Cassé which was built in 1957, witness says he fished there before construction and also between 1960 and 1965 when he found the same species of fish, but he found difficulty in finding fish at the beginning. The following is an extract of his testimony:

"après on a trouvé les mêmes espèces, disons le voyage qu'on avait fait en '59 ou 60, on avait eu de la misère à repérer notre poisson. Notre poisson était pas mal disséminé, on en prenait mais pas en grande quantité. Et puis, en '62, c'était beaucoup mieux, là on avait localisé par, aussi des informations qu'on avait eues de d'autres pêcheurs sportifs, les bons endroits puis en '63, on prenait en grande quantité également puis les poissons étaient à peu près de même taille qu'avant. On prenait les mêmes grosseurs de poissons aussi puis les mêmes espèces."

He adds that the spawning areas were changed.

In counter proof, Professor SPENCE, in referring to the testimony of Rousseau concerning the presence of fish in the other reservoirs in the Province, says one must be extremely specific in relating changes in one reservoir to changes in another reservoir. Generalities are not in the biological sense very valid. He makes the following statement:

A "Now, considering all the reservoirs that have been mentioned, such as Baskatong, Kabonga, Dozois and so on, the vast majority of those who were previously lakes, there are, in many cases, quite old reservoirs, they lie in different drainage patterns with quite a few inflowing rivers and indeed, in some cases, lakes linked to those lakes that became reservoirs. Also, we are talking about a much more southerly situation, a completely different drainage basin. So, although we may be dealing with the same general species of fish, there are racial and genetical differences in fish species in the north that are extremely important, and we may not be dealing with the same genetic pool of fish species. Taking Manicouagan 5 in particular, I would simply like to make a comment that we do not know what the changes in fish species there have been; no impact studies were carried out beforehand. Also, it is too early to be able to ascertain what changes occur in that reservoir because Manicouagan is still filling and it's from this year, 1973 onwards, that we should look for changes. However, I think it is clear that in Manicouagan 5, the pike and the lake whitefish seem, according to the evidence of the respondents, to be reproducing there and I think that is a very reasonable assumption. However, to relate those increases to the increases in the La Grande River, or to say that reservoirs will be equally productive in the La Grande River, in the first place, Manicouagan 5 is not at all productive. From the figures we were given, a lot of fishing effort was exerted in terms of a number of days gill nets were put down to obtain a relatively small yield of fish. In the La Grande River system, we were obtaining, at this more northerly situation, very equivalent yields of fish from the river itself. So, I don't think we can look on Manic 5 as being a productive situation."

With respect to the other reservoirs the proportions of ouananiche to other species is extremely low. In other lakes in the north that he personally fished, for example, the Caniapiscau Lake, the ouananiche were more relatively abundant compared to other species.

Gouin reservoir is not a productive fishery. The presence of fish in a reservoir does not prove that it is a viable habitat for the reproduction of a species. The numbers of fish referred to in P-73 as having been caught in the reservoirs therein mentioned are all extremely low. The lakes are still filling and no studies have been carried out to ascertain what the impact has been. The majority of reservoirs are much smaller than the systems we are talking about in the La Grande River with the exception of Churchill Falls. With respect to the testimony of Doctor Laroche who says it is difficult to determine whether a particular spot is a spawning area, witness replies there are several clues which indicate to a degree of 90% probability that a particular area is a spawning area. With respect to the testimony of Fortin as to the percentage of oxygen in the water at 300 feet and 400 feet at Manic 5, he replies that this is a very deep reservoir whereas in the La Grande River, in particularly at LG-2, large areas will be extremely shallow and there will be a more extreme oxygen decline. Witness says Manic 5 does not specifically give any useful information that would enable us to predict what the outcome of building the LG-2 dam on the La Grande River will be. They are quite different situations. Witness gives detailed reasons to support this statement.

12. Spring flood and ice.

We have seen that the project will result in the control of the flow of water in rivers. In some rivers the flow of water will become constant and the spring flood eliminated.

Professor GILL says, in the sub-arctic, the normal spring flood is one of the mechanisms necessary to maintain the high productivity of the food base. The headwaters of the rivers, specially those that flow south to north, begin breaking up earlier than the other portions of the river, and as a result the ice is physically lifted up by the physical action of rising flood water, and the ice is then flushed out all along the river system in a very short time. If the same ice remained in the river system it would have to melt in place and would take a lot of energy and a lot more

time. Due to the spring flood the growing season along river systems is extended by 1 to 3 weeks. Since the summer season is so short to begin with, the climate will be modified, the vegetation growth will be richer, and habitat or vegetation as used by animals will be richer and more productive. The belts of very highly productive habitat, especially for certain mammals such as aquatic mammals, are therefore narrow. In addition the natural flow regime is characterized by very high and very low floods during the year. This is best exemplified by the spring flood which creates a natural kind of disturbance which plants and animals have adapted to over the last six to nine thousand years. It destroys older segments of the flood plain by erosion but at the same time that it erodes on one side of the bank, it will deposit material during flood stage on the opposite side, and this is very important to plant succession. This occurs within the river valley itself. This new plant growth has the highest productivity of all plants in terms of animal habitat, in terms of how much food it produces for animals. This process is one of the key factors in giving northern river habitats their high primary productivity and takes place in narrow zones from a few feet to within half a mile. Witness then goes on to say that by controling the flow of a river so that there is not a spring flood, the following results will occur:

1.- The climate below the dam will be modified and all along the valley the vegetation and animals will suffer to a certain extent simply because of the lack of production or the reduced production of food. This will also occur when the flow of a river is reduced in order to create a reservoir for the purpose of impounding water above another river.

2.- Along almost every northern river there is a unique sub-ice space along the shore which is rather large. Certain grasses and sedges are exposed in this area, and greatly utilized by muskrat, during the wintertime, and the predators of muskrat, such as mink. Under the normal operation of a dam the winter flow is either leveled off or increased and this unique sub-ice cannot form.

3.- There will no longer be any sediment laid down every spring and consequently mosses will begin to grow. Mosses begin to yield acid products, making the soil acidic, and the highly productive vegetation which has previously occupied the site very quickly gives way to less productive species. As a result, the animal habitat is reduced.

4.- Plant succession is very necessary because it is the early stages of vegetation growth which form the most vital and the richest food for most of the animals living along northern river systems. The continued change caused by flooding and sedimentation maintains the growth of great productive plants. If damming causes a reduction in flow, plant succession continues until finally the site is replaced by less productive species which will clearly affect animal habitat. A reduction in food will especially be shown the following year. They cannot reproduce nearly as rapidly or as fast if the food supply dwindles.

5.- There are lakes adjacent to the river system which are normally not attached to the river except during the flood stage. They may be up to half a mile away. If the flood is reduced, these lakes become more and more divorced from the sediment supply. It's the constant bringing in of nutrients through sedimentation that enables highly productive aquatic and semi-aquatic species to grow in the lakes, and it's these lakes along these rivers that are some of the best waterfowl habitat, both in terms of food habitat and nesting habitat. In a number of years, without bringing in nutrients into these lakes, the vegetation would very rapidly use up whatever nutrients are present and the vegetation would begin to change. Plant succession would occur, so that the more productive species would be replaced by less productive species and there would be a reduction in waterfowl habitat.

6.- If the flow is reduced by damming, the ice will not be flushed out quickly and will simply sit there and finally melt out two weeks or so later. This would then reduce the growing season for vegetation in these areas, and since the summer is so short throughout much of the north, this couple of weeks may be fairly significant especially concerning the reproduction of plants. By shortening the growing season by a week or two, many species of plants will not be able to complete their life cycle.

7.- Rivers which run north-south or south-north in the sub-arctic are used as migration paths by waterfowl. By damming a river the waterfowl migration habitat would be reduced accordingly. These remarks apply to the Caniapiscau River which flows into Ungava Bay.

8.- Otter, which is an aquatic mammal and preys upon fish, will suffer the same effects.

9.- Northern pike is a spring spawning fish and it uses the spring flood to get into many otherwise inacessible lakes. It is a rather significant fish in the North, certainly in the central sub-arctic, and if it is not able to get into these lakes and the small backwater slews in the flood stage, the quantity of pike will decline. This will in turn mean less predator habitat. The number of predators such as otter and mink will therefore decline. It will also have adverse effects on moose, hare and lynx.

10.- In the Peace-Athabasca delta it has been shown that, if the lakes which have been traditionally used by fish are reduced in depth, two things can happen. The first is that the shallower water body becomes warmer during the summer and will affect the spring spawning species such as whitefish. After fish spawn they are in a weakened physiological condition and they enter certain lakes where they recuperate before they begin their next cycle. The lake temperature is raised as it becomes reduced in flow, and fungus infection sets in and there will be a high mortality rate. It is reasonable to expect that this will happen in northern areas where any reduction in water level occurs, particularly lakes that are used by fish after spawning. The second point is that some shallow lakes are heavily utilized by fish and if the lake is too

shallow and the water freezes to the bottom, massive winter kill will occur again, as shown in the Peace-Athabasca delta.

According to this witness all these things (a reduction in waterfowl habitat, in fish habitat, in muskrat habitat, in beaver habitat, and in buffalo habitat,) have happened in the Peace-Athabasca delta and they all had adverse effects on the economy of Fort Chipewyan people. Past experience in the Peace-Athabasca delta suggests that similar things will occur if damming occurs in Ungava Peninsula. It may even be more critical in the Ungava Peninsula where less sediment has been laid down because the very locations of alluvial habitats then take on even greater significance to animals. In the northern environment, the larger the river, the more significant and important are the alluvial habitats along it because of a greater flood stage. A reduced water flow would produce effects immediately (as soon as the very first spring flood is reduced) and it would take 10, 20 or 30 years for a new equilibrium to be established. In cross-examination he says that the basic truths that apply to one northern river will also apply to another northern river. There is more relief in the La Grande area because the latter is on granite bedrock whereas the Peace-Athabasca delta area is a craterous area. In re-examination he adds that whether a river flows through precambrian terrain, such as La Grande River, or through material, such as the Peace River, makes no difference in so far as glacial till and alluvial material are concerned and consequently his remarks apply to both.

Professor KELLERHALS says that the construction of dams will regulate the flow of a river and eliminate the spring flood. The flow will become constant and it will be much greater in the fall and winter than it is presently. In spring the salt water will intrude to a greater degree than previously, and during most of the year there will be more fresh water than presently. This will affect plant life and the change in salinity will mean that in the fall there will be an earlier freeze up in the estuary. The break up in the river ice will be delayed from a week to 10 days.

TAYLOR says that when the project goes into operation the ice in La Grande River will freeze earlier. There will be more

ice because the flow of the river will be greater in the fall than it is now. The break up in spring will be delayed because there will be no spring flood and consequently no lifting of the ice. The vegetation along the shores will be affected because the water table will remain at a higher average position than it is presently and will deviate from that level very little. With respect to Great Whale River the spring flood will continue but there will be less ice because the river is smaller in the fall. The effects on ice and salinity in the Opinaca River will be similar to the Great Whale River. In the Caniapiscau River the salinity in the estuary will increase and will go further up the river. There will be less ice in the winter and the spring flood will be delayed.

Professor POWER, speaking of the Great Whale River diversion scheme, says that if the normal peak spring flow is suddenly reduced the whole system will be flushed out. This will cause severe reductions in fish populations and in populations of aquatic insects. In cross-examination he states that the delay in ice break-up will shorten the warm season. Since there will be less water, ice will freeze faster in the fall. Since walleye needs warm water, its chances of survival will be greatly diminished and it may be even eliminated.

Professor DUNBAR says that the fresh water outflow in coastal areas has, in northern areas, effects upon the ice regime off the mouth of the river (and sometimes for a considerable distance off the mouth) as well as upon the productivity of the waters themselves. When fresh water flows out into salt water, it causes a current to form along the surface and this current carries with it water from down below by frictional forces. Salt water will be brought into the coastal area and up to the surface. This water is laden with nitrogen, phosphorus and silicon in a simple inorganic salt form which is necessary for the plants to begin their annual cycle. Therefore, the outflow is extremely important in maintaining the productivity of coastal areas. The sun becomes a great deal stronger in the spring than in the winter and together with the normal peak of outflow from rivers in the spring produces what the plants require, that is light and nutrient salts. Without this,

plant life would not be abundant in the coastal areas. The former process is called the estuarine effect and is more important dynamically than the winter cooling process or the effect of the wind. In the southern part of Ungava Bay, the inflow from the George, the Koksoak, the Leaf River and the Payne River are all important in maintaining the productivity of the area. Later in his testimony he says that if the flow of the Koksoak River is reduced, the flushing out effect is reduced proportionately. The ratio of spring to fall runoff is 3 to 1. If you reduce the ratio of outflow between spring and fall, you damage the spring production cycle and it is this part of the cycle which is all important. After a great deal of Hydroelectric development the ratio between the spring to fall is about 1.6 to 1, and the ultimate objective of Hydroelectric development is to make the ratio 1 to 1. If for a number of years the spring outflow is drastically reduced, the fish population would react negatively. Since the seal feeds on creatures having a 2 year life cycle, it would take only 2 years for the seal to be affected by this change.

Professor HARE says all the streams on the Eastmain slope and the La Grande River flood and carry with them a very large volume of fresh water and a certain amount of river ice in the spring. This causes the ice to move out of James Bay into Hudson's Bay in late spring. If the flow in these rivers, and particularly La Grande, the Eastmain and the Great Whale Rivers, is regulated it will mean that there will not be as much fresh water flooding into James Bay in the spring as there is now. The bay ice will remain in the bay longer than it does at the present time. The diversion of Lake Caniapiscau and Delorme into the La Grande system is a big change. It will result in more fresh water into James Bay and less into Ungava Bay. The heavy sea ice would be carried a little further up the Koksoak estuary. There will be less water flowing in the Caniapiscau and Koksoak River. The northern environment is very delicate due to the quantity of ice in the soil, the slow regeneration of the vegetation, and the scarcity of animals and plants.

On behalf of respondents, Professor MICHEL filed as exhibit I-123 a report on the effect of the harnassing of the rivers

in James Bay on ice conditions. The conclusions of his report read in part as follows:

"1.- La débâcle de la partie supérieure de la Koksoak sera retardée au maximum de 3 jours, la date moyenne actuelle étant le 7 juin.

2.- Il n'y a aucune corrélation entre l'intensité de la crue de la Koksoak et les conditions de glace dans la Baie. Les modifications apportées au débit de la Koksoak n'auront aucun effet sur ces dernières et celles de la partie inférieure de la Koksoak.

3.- Il n'y a pas non plus de corrélation entre les crues des rivières de la Baie James et la disparition des glaces dans la Baie. On ne peut donc avancer qu'une diminution, augmentation ou variation quelconque de débit, d'une ou des rivières de la Baie James va changer les conditions de glace dans cette Baie.

4.- La débâcle sur la rivière aux Mélèzes (Larch) survient en moyenne 5 jours après celle de la Caniapiscau d'après le Tableau 1. Il est donc peu probable que le tronçon supérieur affecté par la marée de la rivière Koksoak se libère de la glace avant cette date. De toute façon la glace doit partir bien avant la grande crue du printemps qui coincide à peu près sur les deux rivières entre le 5 et 7 juin en moyenne.

5.- Pour la partie inférieure de la Koksoak, la glace ne peut sortir de l'estuaire avant que celle qui se trouve dans la Baie d'Ungava, à l'entrée, ne soit disparue. Cela survient plusieurs semaines après la débâcle des rivières de la partie supérieure, comme nous allons le voir maintenant."

According to the same witness, the average break-up of the Koksoak River occurs around 27 May each year. The flood occurs around 6 June and on these dates there is still considerable quantities of ice in Ungava Bay. In speaking of the basin flowing into James Bay he says that, according to these results, it is clear there is a direct correlation between the characteristics of the break-up in James Bay and spring temperatures. There is no relation between the flood in the rivers mentioned and the period of break-up. It is evident that a reduction of only 2 or 3% in the volume of the flood of the rivers flowing into James Bay will not have any effect

on the ice conditions in the bay during break-up. In cross-examination this witness admits that it is a general principle that if you reduce the flow, you delay the break-up and you hasten the freeze-up. If the flow is reduced, it is easier to form the ice cover but he cannot say how long it will take because this depends not only on the flow but also on other hydraulic characteristics of the river.

MANSFIELD also testifying on behalf of respondents says that although this matter is outside his field of expertise, his opinion is that it would be next to impossible to predict that a change in the flow of the La Grande River would in any way alter the normal pattern of ice distribution and ice break-up in the springtime. The variation is so wide that any change in the river flow would be masked by this tremendous variation of ice. A reduction of approximately 40% in the flow of the Great Whale River would have an effect upon the estuarine current and upon the sea vegetation in the estuary of the Great Whale River. However the seals are not estuarine animals and consequently it would have no effect upon them. The outflow of water from fresh water rivers is important in maintaining the productivity of coastal areas only in the case of very large rivers such as the St. Lawrence River. In the case of small rivers, he does not know what the influence on the marine environment might be. The flood of fresh water during the spring flood is more important to the productivity of coastal areas than at other times of the year because of the change in the rates of flow. He agrees with the statement of Dr. Dunbar who says that: "The less the headflow from the land, the lesser the supply of nutrients, therefore, the lesser the production of plant cells and hence, the less production of animals which feed ultimately upon the plants." He adds however that in the case of small rivers the importance of this particular phenomena is unknown.

13. Regeneration.

The witnesses who testified on this particular subject are all in agreement that regeneration in the territory is slow. This is an important factor to take into consideration since any damage resulting from any particular stage of construction will be lasting in its effects.

Professor HARE says regeneration in the woodland area is slow. It will take many years, perhaps decades, for new wetland habitats to be created. The northern environment is very delicate, there are so few kinds of animals and plants and the regeneration of vegetation is slow. Burns up to 75 years old have been detected.

Professor GILL says that regeneration of vegetation is normally slow in the sub-arctic. It is an environment characterized by stress, especially climatic stress. Along river systems the local climate is changed by rivers through a number of mechanisms which permit vegetation and animals along river systems to have a better economic base. The sub-arctic vegetation across much of Canada and Alaska is depauperated in terms of the very few species of plants and animals but within and along northern river systems there are islands of high productivity which allow animals to have a better food base. This is particularly important since the sub-arctic is characterized by a severe climate subject to great temperature fluctuations during the winter and summer. The number of animals species are very few compared to the rest of the globe. Both the type and numbers of vegetation are limited.

COOK, a specialist in geography and geology, says that in so far as regeneration is concerned it may not occur at all in the region depending on the moisture of the soil. If it does occur it may take from 70 to 150 years.

Speaking on behalf of respondents ROGER LACHANCE, a forestry engineer, says that the process of regeneration in the territory is very slow.

MICHEL JURDANT, a scientific research worker, in speaking of the transformation from one vegetation to another, says regeneration in the La Grande River basin and in the Great Whale River basin is very slow. To give an example, in speaking of wetland habitat witness said it would take a minimum of 30 years for a new wetland habitat to establish itself.

14. Spillway.

SKINNARLAND, an engineer, in giving a description of the works to be carried out referred to the spillway which will be constructed at LG-2. The purpose of this spillway is to permit the discharge of water which exceeds the capacity of the dam. The waters from this spillway will spill into a valley which now has only a small brook. It will be used particularly during the impounding of water in the construction stage and its capacity will be larger than that of the St. Lawrence River. After the water enters this spillway, it will follow the natural contours of the ground and will cover an area approximately 10 miles in length and 200 to 300 feet wide before it reaches the La Grande River.

KELLERHALS, a civil engineer, says that the effects of this spillway during the construction will be very serious. When the reservoir at LG-2 is full, there will be a delay for the construction of the power house and the spillway must then be tested. The water from the spillway will travel down a valley of 10 to 12 miles in length which will be scraped to bedrock. The trees and overburden of the valley will be eroded and brought down into the river channel. The river drops about 300 feet over 12 miles, and there will therefore be a very spectacular erosion taking place in the valley since the water to be discharged will be anywhere from 50,000 to 100,000 c.f.s.. If the overburden is sand and gravel it will go very quickly in a matter of hours. If however it is hard clay, it will go on for months even a year or two before it is scraped to bedrock. The material will end up in the La Grande River. The coarse material will form a delta at the mouth of the spillway at La Grande River. The fine material will cause very dirty conditions in the River. The wood will float out into the estuary.

MURPHY, a geologist, testifying on behalf of respondents said in cross-examination that when the spillway is used there will be considerable erosion. Since the floor of the valley is rock controlled, the rock sills will limit the amount of erosion in the valley. Before the construction of LG-1, the eroded material

will go into the La Grande River. After the construction of LG-1, it will go into the forebay of LG-1.

Although other spillways will be built, the one at LG-2 is the only one which interests this Court because it will be built during the first stages of construction.

15. Roads & culverts.

Professor HARE says that the construction of roads in muskeg areas will create problems of drainage and changes in the water level on both sides of the roads. If the natural drainage is disturbed, trees and shrubs tend to die. Animals living in the muskeg area are used to water levels that exist in nature, and if you change these levels you will alter the living conditions of the animals. In a muskeg area the key to everything is the location of the water. I have already shown that professor HARE in giving a description of the various areas within the territory says that the area between the 49th and 52nd degrees of latitude is a very extensive muskeg area.

Professor MCCART, a specialist in biology, says that all the little streams, over which the road is being built and culverts installed, contain various fish. The installation of these culverts, to permit the passage of small and large fish, will create problems since some small fish will be unable to negotiate the crossing for reasons which he mentions. The spawning areas of fish may also be adversely affected.

On behalf of respondents two employees of Desjardins, Sauriol and Associés spoke about the construction of roads.

JEAN CLAUDE THERRIEN, a civil engineer, speaks about the factors which must be taken into consideration in constructing a road. He says that there is no major problem concerning the construction of roads in the territory. In cross-examination he admits that no consideration was given to the fish living in the streams.

GUY LEFEBVRE, also an engineer, says that 3,400 bore-hole were made to test the nature of the soil, and as a result of these preliminary tests they were able to determine areas where

difficulties would be encountered. They took all the necessary precautions to ensure the stability of the road. In cross-examination he admits that during preliminary studies and during the construction of the route the contractors did not worry about the animals nor the fish in the rivers.

With respect to this particular subject, the Court concludes that, although there will be some adverse effects caused to the animals and to the fish in the region where the roads and culverts are being built, it is impossible to assess the nature and extent of this damage. Subject to what I have already said, I do not consider this particular matter as important as the damages which will be caused elsewhere in the territory.

16. Is proper management possible?

Professor HARE says by properly managing the flooded areas the damage can be minimized. In cross-examination in speaking of roads he says that with proper construction one can minimize the harmful effects but he could not say that there would be none.

In cross-examination, professor DUNBAR agrees that good management will always reduce negative effects but the total effect of the project, even with good management, is negative because you are dealing with a sub-arctic forest area which is delicate, and with fish populations which are adapted to a particular sort of environment which you are changing. No matter how well the program is managed, there will be negative effects upon the coastal productivity. In re-examination he states that proper planning is not possible because the necessary studies have not yet been made. It would take 2 years with proper personnel and equipment to carry out such a study.

COOK in referring to wetland habitats says that one cannot properly manage these habitats.

In cross-examination professor POWER expresses the opinion that there are very few examples of fisheries management. No one can properly manage such a system.

The record for the North American Continent over the last 100 years is one of disaster. Successes in this area are few and far between. The mistakes many times outnumber the successes. To illustrate his point he states his reasons why he believes that the walleye will be eliminated.

Professor CLOUGH, a specialist in environmental problems, ecology and animal behavior, in speaking of the adverse effects which the project will have on animals and vegetation, says there is no way good management can restore an area which is lost in this manner.

WALLACE L. CHADWICK, a consulting engineer, in discussing the different stages in the development of a hydroelectric project states that, according to his observations, the project is proceeding in accordance with the best engineering practices with which he is familiar.

17. Miscellaneous.

JOHN BERRY, a professor in psychology, gives evidence concerning stress marginality and the following 3 attitudes, namely, assimilation, integration and rejection. He spoke in detail about acculturation, a process which occurs when two cultures come into contact with each other, usually a dominant culture and a less dominant one. It is essentially the changes wrought on a group of people by a dominant culture. This of course creates stress and other problems which are referred to in his testimony. According to this witness, the tests which were carried out in the territory show that the Cree Indians wish to retain their own cultural characteristics and are subject to increased stress with increased acculturation.

On behalf of respondents, anthropologist BERTRAND speaks at length about the impact which the white man has had on the Cree Indian. Because we are living in a technological world, he does not see how any people can attempt to remain completely attached to roots which no longer relate to the global environment which surrounds us. In cross-examination he admits that the Cree Indians have been able to reconcile modern technology with their own way of life.

In counter proof HARVEY FEIT was requested to rebut certain allegations made by Bertrand. Although the evidence of these 3 particular witnesses is interesting, it cannot have any bearing on the final outcome of this petition.

Anthropologist TANNER says that the killing of all animals has a strong religious significance to Cree Indians and is governed by religious beliefs and value. He describes the religious significance of these ceremonies.

ROGERS confirms that their religion revolves around the game animals.

13. Concluding comments on the effects of the project.

Although the parties were permitted to adduce proof on the entire project, it must be borne in mind that, since this is a hearing on an application for an interlocutory order of injunction, only the works scheduled to be carried out in the very near future will be considered by the Court in deciding whether the application should succeed. Skinnarland, testifying on behalf of petitioners, and Amyot, testifying on behalf of respondents, are in agreement that not only will many important works be carried out during the current year and during the year 1974, but that the critical period will occur within the next few months. It is therefore these works which are of greatest importance to the present issues.

In reviewing the evidence I find that petitioners are justified in their apprehension of injury to the rights which they have been exercising. Damages to the flora and fauna have already taken place. Further considerable damage will be caused by the works which are presently going on. Still more extensive and more serious damage will occur as the work progresses.

The major rivers in the territory will be completely transformed. The flow of some will be cut off, reduced, increased, or diverted. Others will be formed into a series of lakes. Changes in the flow of rivers and the creation of reservoirs will flood many lakes. The beds and banks of rivers will be eroded. Areas of dry land will be flooded. The normal spring flood will not occur. The wetland habitat on which so many animals depend will be destroyed.

The lichen area will be reduced significantly. The disruptive effects resulting from these changes were discussed in detail by the witnesses. It will therefore serve no useful purpose to summarize what was said by each witness on the various matters referred to in this part. Suffice it to say that the evidence discloses that these works will have an adverse effect on the birds, the fish, the animals, and aquatic life generally. The number of animals will be reduced significantly. Petitioners will no longer be able to make use of the fruits of the soil. They will no longer be able to hunt, trap, and fish in the areas affected. The ecological balance which existed in the region will be seriously disturbed. The mutual relations existing between the organisms and their environment will be completely upset. The environment will be changed. According to Fenton, the whole system which took 8,000 years to develop will be destroyed.

Furthermore regeneration in the area is very slow. Witnesses testified that it will take anywhere from 30 to 50 years for a new wetland habitat to establish itself. It will take many, many years for a new equilibrium to be reached. There are very few species of plants in the region and in addition both the type and numbers of vegetation are limited.

In view of the dependence of the indigenous population on the animals, fish, and vegetation in the territory, the works will have devastating and far reaching effects on the Cree Indians and the Inuits living in the territory and the lands adjacent thereto.

PART VI

1. Immunity of the Crown.

Respondents submit that respondent Development Corporation, respondent Energy Corporation, and respondent Hydro-Quebec are agents of the Crown and consequently immune from proceedings by way of injunction. In support of this argument they cite articles 94b and 100 C.C.P., section 3 of Bill-50, and section 13 of Hydro-Quebec Act.

The first two articles mentioned read as follows:

"94b. No extraordinary recourse or provisional remedy lies against the Crown.

100. No extraordinary recourse or provisional remedy lies against a minister of the government of the province or any officer acting upon his instructions to force him to act or to refrain from acting in a matter which relates to the carrying out of his duties or to the exercise of any authority conferred upon him by any law of the province."

Section 3 of Bill-50 states:

"The Corporation shall have the rights and privileges of a mandatary of the government.

The property of the Corporation shall form part of the public domain but the performance of its obligations may be levied against such property.

The Corporation binds none but itself when it acts in its own name."

Section 13 of the Hydro-Quebec Act ch. 86 Revised Statutes of Quebec 1964 states:

"The Commission, for the purposes of this Act, is, and has been ever since the 14th of April, 1944, an agent of the Crown in right of the Province".

Petitioners reply to this argument by saying that immunity does not apply and even if it did respondent corporations have exceeded their jurisdiction and can be enjoined.

It will be most helpful to examine the jurisprudence before proceeding to an analysis of the arguments submitted by opposing counsel. In a recent decision, the Supreme Court of Canada spoke about the right of ordinary citizens to sue an agent of the Crown. I refer to Le Conseil des Ports Nationaux vs. Langelier

et al. 1969 S.C.R. 60. The owners of properties bordering on the St. Lawrence River asked the Court to restrain the National Harbors Board from carrying out certain works on the river which, they claimed, would injuriously affect their respective properties. The Board moved by way of declinatory exception to dismiss the petition on the ground that, being an agent of the Crown, it was not subject to injunction. The declinatory exception was dismissed at the trial and this judgment was affirmed by the Court of Appeal. The appeal to the Supreme Court was dismissed. Martland J. delivering the judgment of the Court referred with approval to the majority decision of the Court below and to the statement of Choquette J. who said that if the Board exceeds the powers conferred upon it by the act, it cannot be said that it is acting as an agent of the Crown. He compared the Board to the position of a Minister exceeding his authority and thereby engaging his personal liability. He then refers to Dicey who says that officials are liable in their personal capacity "for acts done in their official character but in excess of their lawful authority". He then cites authority to show that a servant of the Crown is responsible in law for a tortious act done to a fellow subject though done by the authority of the Crown, and that if a wrongful act has been committed against the person or property of any person the wrongdoer cannot set up as a defence that the act was done by the command of the Crown.

At p. 70 he says:

> "What is in issue here is the responsibility of a person, whether individual or corporate, who, though a Crown agent, and purporting to act as such, commits an act which is unlawful. My understanding of the law is that a personal liability will result. The liability arises, not because he is an agent of the Crown, but because, though he is an agent of the Crown, the plea of Crown authority will not avail in such event."

and at p. 71

> "After reviewing the authorities cited by counsel, and a number of other cases, which I do not think it is necessary to list, my understanding of the position of servants or agents of the Crown, at common law, in respect of a claim in tort, is this:
>
> First is the proposition that the Crown itself could not be sued in tort.
>
> Second is the proposition that Crown assets could not be reached, indirectly, by suing in tort, a Department of Government, or an official of the

Crown. As to a Government Department, there was the added barrier that, not being a legal entity, it could not be sued.

Third is the proposition that a servant of the Crown cannot be made liable vicariously for a tort committed by a subordinate. The subordinate is not his servant but is, like himself a servant of the Crown which, itself, cannot be made liable.

Fourth is the proposition that a servant of the Crown, who commits a wrong, is personally liable to the person injured. Furthermore, if the wrongful act is committed by a subordinate, at his behest, he is equally liable, not because the subordinate is his servant, but because the subordinate's act, in such a case, is his own act. This is what is said in the passage from Raleigh v. Goschen, previously cited.

Is the position any different because the agent in this case is not an individual, but a corporation? I think not, and I agree with the reasoning of Atkin, L.J., in the Mackenzie-Kennedy case."

And further on the same page

"In my opinion, if a corporation, in the purported carrying out of its corporate purposes, commits a wrongful act, it is liable therefor and it cannot escape liability by alleging that it is not responsible for anything done outside its corporate powers. This is true whether it is purporting to act as a Crown agent, or not."

In the Quebec Court of Appeal, 1968 B.R. 113 Choquette J. at p. 116 expressed himself as follows:

"Comme on le voit, ce n'est que "pour les fins de la présente loi" que le Conseil "est censé être le mandataire de Sa Majesté". Si le Conseil excède les pouvoirs que la loi lui confère, si, par exemple, il s'empare de "terrains ou d'un droit de propriété limité, ou d'un intérêt limité dans des terrains" sans l'autorisation préalable du gouverneur en conseil et sans l'expropriation ou le consentement prévus à l'article 11, il ne peut être dit que le Conseil agit comme mandataire de la Couronne. Dans ce cas, le Conseil est dans la position d'un ministre qui outrepasserait ses attributions, engageant ainsi sa responsabilité personnelle.

Ce n'est donc pas contre la Couronne que les intimés demandent une injonction, mais contre le "corps constitué et politique" qui a excédé ses pouvoirs et qui est quand même "habile à ester en justice en son propre nom" pour se voir ramener dans les limites de son mandat. L'injonction est aussi dirigée contre les représentants et préposés du Conseil."

In Baton Broadcasting Ltd. v. Canadian Broadcasting Corporation et al. 56 D.L.R. (2d) 215, a judge of the Ontario High Court held that Crown agencies are not immune to proceedings if they act on invalid statutory authority or exceed their authority. After referring to the case of Rattenbury v. Land Settlement Board and the

case of Roncarelli as being examples of public officers losing their official status by acting beyond the authority of a statute, he goes on to say at p. 221:

> "I have come to the conclusion that in the circumstances of this case, the fact that the defendant corporation is an agent of the Crown does not deprive the Court of its jurisdiction to restrain such defendant from using the film and sound-track procured on the plaintiff's premises in its programmes."

And at p. 222:

> "I am of the opinion that an injunction is a proper remedy herein and it will preserve the status quo of the matter until trial. More harm would be done by allowing the defendant corporation to use such film than by restraining it. It would be difficult to assess damages which would adequately compensate the plaintiff for the infringement of its rights."

In Formea Chemicals Limited v. Polymer Corporation Limited 1968 S.C.R. 754 plaintiff as assignee of a patent commenced proceedings for infringement against the defendant a Crown Corporation. Section 19 of the Patent act provides that "The government of Canada may at any time use any patented invention paying to the patentee such sum as the commissioner reports to be reasonable compensation for the use thereof". The Court held that by virtue of section 19 of the Patent act the defendant had statutory authority to use the patent. The phrase "Government of Canada" in that section is equivalent to "the Crown". At page 758 Martland J. who delivered the judgment of the Court said:

> "It is unnecessary to determine, in the circumstances of the present case, what may be the liability of an agent of the Crown, which, without lawful authority, infringes upon the rights of others. I do not base my decision upon, nor do I adopt the general proposition that an action in tort will not lie as against an agent of the Crown".

And at p. 764:

> "In my opinion the Crown, under s. 19, has an unrestricted right to use a patent. It caused the respondent to be incorporated to manufacture, sell and deal in synthetic rubber and made the respondent, for all its purposes, its agent. The use by the respondent of the patent was, in the circumstances, a use by the Crown within s. 19. This being so, there was no infringement by the respondent of such patent".

In British Columbia Power Corporation, Limited vs. British Columbia Electric Company Limited et al. 1962 S.C.R. 642, the Supreme Court of Canada was called upon to decide whether the

Court had jurisdiction to make a receiving order so that the assets of the company might be preserved pending the determination of certain issues, because it was alleged such an order cannot be made since it affects the property or interests of the Crown. Kerwin J. delivering the judgment of the Court says at p. 644:

> "In a federal system, where legislative authority is divided, as are also the prerogatives of the Crown, as between the Dominion and the Provinces, it is my view that it is not open to the Crown, either in right of Canada or of a Province, to claim a Crown immunity based upon an interest in certain property, where its very interest in that property depends completely and solely on the validity of the legislation which it has itself passed, if there is a reasonable doubt as to whether such legislation is constitutionally valid."

The principles outlined above were followed in the cases referred to below.

Ascenseurs Alpin-Otis Cie Ltee vs. le Procureur General de la Province de Québec et al. 1970 C.S. 232, Dorion C.J. at p. 233 says:

> "L'une des objections soulevées par les intimés, c'est que le tribunal n'a pas juridiction pour mettre de côté une décision du gouvernement de la province ou de l'un de ses ministres. Il faut dire cependant que cette règle comporte des exceptions et si un ministre de la couronne dans l'exercice de ses pouvoirs excède sa juridiction, la Cour supérieure peut intervenir."

McKenna Limited v. Kierans et Autres 1971 C.S. 223, at p. 228 Bisson J. says:

> "Sur les pouvoirs discrétionnaires des ministres de la Couronne, le tribunal réfère à un article intéressant cité par les avocats des défendeurs, soit celui du professeur B.L. Strayer, intitulé Injunctions against Crown Officers (14).
>
> En somme, on peut affirmer que dès qu'un ministre pose des actes qui sont à l'intérieur des pouvoirs qui lui sont conférés par la loi dont il a l'administration, le pouvoir judiciaire ne peut intervenir. En effet, il appartient au Parlement seul de juger de ces actes.
>
> Le pouvoir judiciaire n'interviendra que dans la mesure où le pouvoir exécutif excèdera sa juridiction, dans la mesure où un ministre posera des actes qui excèderont la juridiction que le Parlement lui a conférée par des lois.
>
> A l'intérieur de ces limites, le ministre exerce un pouvoir discrétionnaire dont il n'est pas comptable envers le pouvoir judiciaire."

In the case of Lepage et Autres vs. L'Association Québécoise des Pharmaciens Propriétaires, (1973) R.P. 73 Bard J.

in considering an application for an interlocutory order of injunction says at p. 79:

> "Quelles que soient les règles définies au chapitre précité "des causes intéressant le ministère public", il est d'ores et déjà reconnu que la Couronne ne jouit plus de ses prérogatives de façon absolue. Malgré le texte impératif des articles 94b et 100 C.P.C., et autres de même nature, qu'ils soient privatifs ou prohibitifs, il se présentera toujours quelques cas particuliers, susceptibles d'affecter des droits fondamentaux où, dans l'intérêt de la justice l'injonction devra être accordée."

In considering the same action on its merits Bernier J. in an unreported judgment dated 30 April 1973 (Lepage et al v. l'Association Québécoise des Pharmaciens Propriétaires bearing number 11496 of the records of the Superior Court of the district of Quebec) says:

> "Le Gouvernement tout comme le Parlement est certes un corps politique. Il n'y a aucun doute qu'un citoyen qui a l'intérêt nécessaire peut attaquer les actes posés par l'un ou l'autre de ces corps politiques s'il y a eu excès ou absence de juridiction. Il n'y a aucun doute que le tribunal a droit de constater l'inexistence légale de décisions prises ou d'actes posés par le Gouvernement lorsqu'ils ne relèvent pas de sa compétence; le tribunal est aussi d'avis qu'il y a lieu d'annuler des décisions prises et des actes posés lorsqu'il s'agit d'un cas d'abus de pouvoir."

It is therefore clear that immunity does not extend in favor of a Crown agent who acts without lawful authority, performs an unlawful act, acts outside the statutory authority, exceeds his jurisdiction, or acts in virtue of invalid statutory authority.

It now becomes necessary to decide whether the plea of immunity is applicable to any of the three respondents referred to. It is well to remember that, by section 4 of Bill-50, Development Corporation is authorized to promote the development and exploitation of natural resources in the territory, and by section 16 it may incorporate a company to develop the hydroelectric resources in the territory.

The plea of immunity cannot apply to Energy Corporation because the latter was created by Development Corporation as its subsidiary for the purpose of developing the hydroelectric resources in the territory. Neither Bill-50 nor the letters patent by virtue of which it is constituted contain any reference to immunity in its favor.

In so far as the other respondents are concerned, I again refer to Bill-50. The word territory is used throughout the act and, as stated in the opening part of this judgment, refers to the territory described in the schedule to Bill-50. The jurisdiction of Development Corporation and any subsidiary created by it extends only to the territory therein defined. It is clear therefore that Development Corporation and any subsidiary incorporated under Bill-50 can exercise their powers within the territory only. Notwithstanding the express provision to this effect in Bill-50, Energy Corporation entered into an agreement (exhibit I-166) with Hydro-Quebec for the purpose of developing the watersheds outside of the territory. The second preamble of this agreement says that a rational and efficient hydroelectric development of the territory requires the joint development of the hydroelectric resources contained in the watersheds adjoining the territory. In the third preamble, Hydro-Quebec expresses its willingness to undertake the installations required for the development of these adjoining watersheds. By virtue of section 1 the parties agree to collaborate one with the other in the development of hydroelectric resources for the La Grande complex in the territory and in the watersheds adjacent to the territory. If the Provincial Parliament had intended to grant the Development Corporation or its subsidiaries power to carry out or cause to be carried out works in the watersheds adjoining the territory, it would have said so. On the contrary, it restricted their powers to works within the territory. They are therefore acting in excess of the jurisdiction conferred upon them. Since they do not have the authority to carry out such works, Energy Corporation cannot cause such works to be carried out by a third party which in the present instance is Hydro-Quebec. Consequently, section 13 of the Hydro-Quebec Act cannot be a bar to these proceedings.

Section 43 of Bill-50 is also relevant to this issue. This section reads as follows:

> "This Act shall in no way affect rights of Indian Communities living in the Territory."

The evidence discloses, without any shadow of a doubt, that the rights of Indian Communities living in the territory are

being adversely affected by the works. Since this particular provision has been violated, respondent corporations claiming immunity as agents of the Crown fall within the rules set forth in the jurisprudence cited above. They are acting in excess of their lawful authority and in doing so, they lose whatever immunity they possess. The remedy by way of injunction is therefore available and they must be restrained.

Although the foregoing is sufficient to dispose of the issue of immunity there is one final observation to me made. Bill-50 was enacted by the Legislature of the Province of Quebec. By the simple inclusion of section 3 in Bill-50, the Province of Quebec allows Development Corporation to plead Crown Immunity. Elsewhere in this judgment I fully discussed the nature and extent of the obligation assumed by the Province of Quebec under the Law of 1912. Since it has an obligation to treat the Indians in the manner stated above, it should not be permitted, directly or indirectly, to encroach upon or interfere with the rights of petitioners and thereby create a factual situation which cannot be remedied by the final judgment. Since there is a reasonable doubt as to the validity of this legislation, the works being carried out under its authority should be stopped until a final decision is reached on the merits of the action.

2. Privative clauses.

Respondent Hydro Quebec claims that section 15 of the Hydro-Quebec Act grants it immunity from proceedings by way of injunction. Section 15 as amended by 1969 S.Q. ch 34 reads as follows:

> "The members of the Commission cannot be sued by reason of official acts done in good faith in the exercise of their functions.
>
> No extraordinary recourse contemplated in articles 834 to 850 of the Code of Civil Procedure shall be exercised and no injunction shall be granted against the Commission or the commissioners acting in their offical capacity.
>
> Article 33 of the Code of Civil Procedure shall not apply to the Commission."

Petitioners allege that Hydro-Quebec is acting in excess of the jurisdiction confirmed upon it and therefore is not

entitled to the protection of this section. Petitioners also submit that Hydro-Quebec is acting outside the scope of its jurisdiction and has not followed the procedures set out in sections 33 (3) and 32 of the Hydro-Quebec Act.

Certain works which Hydro-Quebec proposes to carry out cannot legally be done by either the Development Corporation or the Energy Corporation because the location of these works lies outside the territory defined in Bill-50. These works consist in general of constructing a dam at the source of the Caniapiscau River, and diverting the waters from the reservoirs at Caniapiscau Lake and Lake Delorme into the James Bay territory. The purpose of these works is to increase the water flow in the La Grande River and thus increase the generating capacity of the power houses which will be built on the La Grande. The contract entered into between Energy Corporation and Hydro-Quebec, exhibit I-166, sets out the contractual relationship which exists between them concerning the proposed works. If Development Corporation and Energy Corporation are unable to carry out these works because they lie outside their jurisdiction, surely they cannot delegate another person to carry out these works on their behalf.

I also note that the privative clause in favor of Hydro-Quebec contains the words "acting in their official capacity".

The Courts have often held that a privative clause will not afford any protection when a person exceeds his jurisdiction.

In Metropolitain Life Insurance Company vs. International Union of Operating Engineers (1970) S.C.R. 425, the Supreme Court considered the action of the Ontario Labour Relations Board in failing to deal with a particular question submitted to it. The Board had jurisdiction to proceed with the inquiry and the certificate issued was on its face one which the Board had jurisdiction to issue but it failed to perform the task imposed upon it by the Act by failing to deal with the question remitted to it and instead decided a question which was not remitted to it. Cartwright C.J. delivering the judgment of the Court held that, by proceeding in this manner, the Board stepped outside its jurisdiction and the

privative clauses of the Act could not avail to protect its certificate.

In the matter of Jarvis v. Associated Medical Services Inc. et al (1964) S.C.R. 497, the Supreme Court was considering an appeal relating to the provisions of the Ontario Labour Relations Act. The majority held that the privative clause contained in section 80 of the Act did not prevent the quashing of the decision of the Board. The effect of this section, if it received the construction most favourable to the appellant, was to oust the jurisdiction of the superior courts to interfere with any decision of the Board which was made in exercise of the powers conferred upon it by the Legislature; within the ambit of those powers it might err in fact or in law; but the section did not mean that if the Board purported to make an order which, on the true construction of the Act, it had no jurisdiction to make the person affected thereby was left without a remedy. The extent of the Board's jurisdiction was fixed by the statute which created it and could not be enlarged by a mistaken view entertained by the Board as to the meaning of that statute.

In Procureur Général de la Province de Québec et Autres v. Cité de Chambly et Autres (1971) C.A. 138 Casey J. at p. 141 says:

> "However it is a well established jurisprudential rule that where a person, in this case the Commissioner, acts or is about to act under the authority of a provision of law that is ultra vires the legislative authority, then that person is without jurisdiction of any kind. We have equated this with acting outside the exercise of that person's functions, and, in these circumstances, we have authorized the issue of writs of prohibition and have consistently held that the protection of the privative clause disappears. Applied to this case I would say that if article 18 is ultra vires, the City of Chambly will be entitled to prevent the Commissioner from acting under its authority."

In Commission des relations de Travail v. Civic Parking (1965) B.R. 657, Casey J. at p. 663 says:

> "Up to the present the courts have held that despite the broad terms of the privative clause (41 old law) the prerogative writs will lie if the Board acts without jurisdiction. By inserting in section 121 the words "relating to the exercise of their functions" the Legislature seems to have conceded the point and the text of the law now justifies the proposition that if the Board steps outside its field it will not enjoy the protection of the privative clause."

> But in the audi alteram partem cases the position is somewhat different. This problem crops up when the Board, engaged in doing what it was designed to do, that is when acting within its jurisdiction, condemns someone unheard. This feature, that the Board is acting within its jurisdiction, is important, for if audi alteram partem were no more than a rule of procedure the Board would be covered by section 121.
>
> But it is generally conceded that the violation of this rule vitiates the proceedings in which it occurs and entitles the party aggrieved to attack the decision. I am not prepared to decide whether the Legislature may eliminate this doctrine from our law, as it may well have tried to do by the wording of section 121, but I do think that it may regulate the manner in which the right to relief must be exercised."

In Commission des Relations de Travail du Québec v. Houghco Products Limited (1965) B.R. 561 Owen J. in dealing with section 122 of the Quebec Labour Code said: "There is strong authority for the proposition that if a body such as the Quebec Labour Relations Board exceed its jurisdiction then privative clauses such as section 121 of the Quebec Labour Code do not apply" and cites jurisprudence in support of this principle.

In Association Internationale des Commis du Détail v. Quebec Labour Relations Board (1968) B.R. 601 Owen J. with whom Tremblay C.J. agreed said: "If a body such as the Quebec Labour Relations Board exceed its jurisdiction then such privative clauses do not apply."

In Association Catholique des Enseignants de l'Estrie v. La Commission des Ecoles Catholiques de Sherbrooke (1970) C.A. 369, Brossard J. says that it is now a well established jurisprudential rule that privative clauses will not be applied by the courts when there is absence of jurisdiction.

For the reasons given it appears that Hydro-Quebec has exceeded its jurisdiction and consequently the rules established by the jurisprudence are applicable to the present case.

I conclude therefore that the arguments raised by petitioners are very serious and it would appear that Hydro-Quebec is not entitled to the protection of the privative clause. Petitioners should be given an opportunity to have this matter determined by the final judgment to be rendered herein.

PART VII

THE QUESTION OF DELAY

Respondents argue that petitioners should have instituted proceedings in injunction as soon as their rights were threatened. They refer to the testimony of certain witnesses who said that they were aware of the project quite some time before the proceedings were instituted. It is my intention to examine the testimony of the witnesses in this respect.

MAX GROS-LOUIS, secretary-treasurer of the Indians of Quebec Association, testified that he first heard of the project on April 29, 1971 when a meeting took place with the Minister of Natural Resources. The Government was then considering the implementation of one of two schemes. The first scheme would be in the south, in the Nottaway, Broadback and Rupert Rivers area, and the other in the La Grande area. The Indians decided to have a meeting and this took place in July 1971 when they expressed their opposition to the project and so informed the Provincial and Federal Authorities. At this time they did not have in their possession any documents concerning the project and, when they tried to obtain information, they were told that the matter was under study. When they became aware that Bill-50 was adopted they immediately held a meeting to oppose the project. Between July 1971 and the beginning of 1972, they had about 10 meetings with representatives of the Quebec Government to obtain information about the project and the rights of Indians. It was only in the spring of 1972 that they were informed that the Government intended to go ahead with the project and, upon receiving this news, they held a meeting at Fort George in April 1972. At this meeting they decided to take legal proceedings, and form a task force consisting of experts and Indians to carry out research on the project. Dr Spence was placed in charge of the research which was carried out between June and September 1972. After receiving the report of the task force in September, they had 4 to 5 meetings with representatives of the Government and the James Bay Corporation. They gave the latter one month to give them an answer.

but they did not receive any answer. Witness says that delays occurred because the communication in the James Bay area is difficult due to a shortage of aircraft, many Indians were on their trap lines and it was difficult to communicate with them, and they did not have the required money until they received federal assistance in July and August 1972.

ANDREW DELISLE, president of the Indians of Quebec Association, refers to meetings and negotiations which took place between representatives of the Association on the one part and members of the Provincial and Federal Authorities in 1971 and 1972. He refers to a meeting held in August 1971 at the offices of Messrs. Geoffrion and Prud'Homme in Montreal and another meeting in September 1971 in Quebec City when they were referred to the respondent Development Corporation in Montreal from whom they received only technical information. Between September 1971 and May 1972, the Association had 15 to 20 meetings with representatives of the respondent Development Corporation. Before receiving, in September 1972, the report of the task force, they had no knowledge of the effects of the project.

ROBERT KANATEWAT, Chief of the Fort George Band, says that his people did not believe that the project would go through without the Indians being consulted and some of them still do not believe what is going on. To understand the difficulties which were encountered, I refer to a portion of his testimony:

A "Yes, there were a number of band meetings held and this when I say and what I mean when I say, it's hard to describe and also what, especially, when I just say that people have never been down here they don't actually know, they can't actually visualize the impact that's going to be done on the project itself, also this sort of information, that you cannot describe a language and put it, into words when you have a language let's say, for an example, if you have 24,000 words in the English language, you only have about 2,800 in the Cree language and out of these words, you have to try and explain and this is where the difficulty comes in.

Q Have your people, over the last year or two, accepted the project?

A No, they haven't.

Q And, have you had band meetings over the last few months in relation to the project or what has transpired?

A Yes, I have. I had about a couple in the month of February when I was home.

Q Of 1973?

A Of 1973 and even at that, well, all the times I tried to explain what goes on, even I know for sure that some people still cannot visualize.

Q And how many people attend those meetings?

A Approximately between four and five hundred."

Witness then refers to meetings which took place in Quebec City and in Montreal between April 1971 and October 1972. The Indians wanted to stop the project and have their rights recognized by the Province.

During the testimony of this witness, the parties admitted that a series of meetings to negotiate all Indian matters in the Province of Quebec took place between representatives of the Indians of Quebec Association on the one part, and a board of negotiators, representing the Province of Quebec, presided by Honourable Lionel Chevrier. The dates of these meetings are 27 September 1971, 23 November 1971, 15 December 1971, 20 January 1972, 29 February 1972, 11 April 1972, 29 August 1972, 14 September 1972 and 23 October 1972. These meetings dealt with the entire question of Indian matters in the Province of Quebec and included the Indians of James Bay and all their problems.

Dr SPENCE attended about 6 formal meetings and several more casual get-togethers with representatives of the respondent Development Corporation, the respondent Energy Corporation and the Quebec Government between June and October 1972 in order to discuss modifications to the scheme which would be necessary to avoid damage to the resources used by the native people, but there was no satisfactory conclusion reached at those meetings. During his testimony of 15 February he says "No, we really didn't get very far, we didn't get anywhere. We talked for a long time but there was no satisfactory conclusion to those meetings."

Testifying on behalf of respondents, Father STEINMANN who has been living in northern Quebec since 1937 and has been living in Povungnituk since 1956, says that even as late as the summer of 1972 he personally did not know anything about the project. If a

person holding his position and having his background was ignorant of the project until after the summer of 1972, it is not surprising that it took so long for the Indians and Eskimo to obtain knowledge of and react to the project.

ANDRE LANGLOIS, speaking on behalf of respondents, also referred to numerous meetings which took place with representatives of petitioners. He says that the choice of the La Grande project was only decided on 12 May 1972. He says that the most important meeting was the one which was held on 15 June, when representatives of the Government and the respondent Corporation advised the Indians that a final decision had been reached and the respondent Development Corporation intended to proceed with the La Grande project. It is only at this meeting that they informed representatives of petitioners of the work which would be carried out and their strategy for the development of the whole region.

BERTRAND, also testifying on behalf of respondents, said in cross-examination that the majority of Indians are not aware of the details of the project and the impact which it will have on their people. He admits that there are difficulties of communication because of the language problem, the distance, and the type of work which they do.

The delay in the present instance is not material because petitioners are seeking to enforce a legal right. Furthermore, there are understandable difficulties of language, distances and communication. In an attempt to avoid legal proceedings and obtain an immediate recognition of their rights, petitioners entered into negotiations with representatives of the Government, the respondent Development Corporation and the respondent Energy Corporation. These negotiations were carried out in good faith and one should not be penalized for trying to avoid lengthy and costly legal proceedings. It is also reasonable to assume that since treaties were entered into with other tribes in many parts of Canada, that a similar attitude would be adopted in this Province. I also note that Bertrand said that this is the first time that Cree Indians have acted together as a group. It took this mammoth project to get them to react.

In any event, petitioners are now before this Court, seeking to redress a wrong and should be given every opportunity of obtaining justice and technicalities of this nature should not be a bar to proceedings.

Kerr on Injunctions 6th Edition 1927 Vol. 1 p. 23 says:

> "But delay in taking proceedings is not so material whilst matters remain in statu quo. Moreover, it seems that mere delay is not material where an injunction is sought in aid of a legal right, and that accordingly mere lapse of time will not be a bar to the granting of an injunction at the trial, unless it would be a bar to the legal right. "Mere acquiescence said Lord Cranworth, in Rochdale Canal Co. v. King, "(if by acquiescence is to be understood only the abstaining from legal proceedings) is unimportant. Where one party invades the right of another, that other does not in general deprive himself of the right of seeking redress merely because he remains passive, unless indeed he continues inactive so long as to bring the case within the Statute of Limitations".

High on Injunctions fourth Edition volume 1 p. 16 states "...where the legal right still exists, no period of inaction or delay merely, when unaccompanied by any of the elements of an estopple, will constitute a bar to equitable relief unless continued so long and under such circumstances as to bar the right itself ."

In l'Association des Policiers de la Cité de Giffard v. la Cité de Giffard (1968) B.R. 863 the Chief Justice of Quebec said that the general rule is that every citizen has a right to petition a common law Court and any restriction to the exercise of this right constitutes an exception which sould be strictly interpreted.

PART VIII

1. Right to obtain relief by injunction.

The doctrine and the jurisprudence recognize that a person may apply to a High Court of Justice to protect his property rights.

Kerr on Injunctions 6th Edition 1927 p. 15:

> "The jurisdiction of the High Court of Justice by injunction is not confined to the protection of equitable rights, but extends to the protection of legal rights to property from damage pending litigation. The protection of legal rights to property from irreparable or at least from serious damage pending the trial of the legal right was part of the original and proper office of the Court of Chancery."

In the case of Massie and Renwick Ltd. vs. Underwriter's Survey Bureau Limited 1937 S.C.R. 265 Hudson J. at p. 268 says:

> "The law governing the court in granting or refusing an injunction is correctly stated in Ashburner's Principles of Equity (2nd Ed. 1933, page 343):
>
> Where the court has jurisdiction to grant an injunction, the question whether it will grant it or not is a question of discretion. It is not bound to grant an injunction merely because A threatens and intends to violate a legal right of B. But the tendency of the decisions in recent years is to limit the discretion of the court, and it may be laid down that every threatened violation of a proprietary right which, if it were committed, would entitle the party injured to an action at law, entitles him, prima facie, to an injunction, and the onus is upon the defendant of rebutting the presumption in favour of an injunction, by showing that damages will be an adequate compensation to the plaintiff for the wrong done him, or that on some other ground he is not entitled to equitable relief."

In speaking about Trespass Kerr enunciates the rule as follows p. 92:

> "The jurisdiction of the Court by injunction in cases of trespass is in aid of the legal right. If the right at law is clear and the breach clear, and serious damage is likely to arise to the plaintiff if the defendant is allowed to proceed with what he is doing or threatens to do, an injunction will be granted pending the trial of the right. But if the right at law is not clear or the breach is doubtful, and no irreparable injury can arise to the plaintiff pending the trial of the right, the case resolves itself into a question of comparative convenience."

And at p. 93:

> "In the case of trespass of a continuing nature, however, the Court will generally interfere by injunction, and the Court will interfere by injunction where the trespass, although not of continuing nature, is serious, or threatened to be repeated."

High in A Treatise on the Law of Injunctions, 4th ed., Vol. 1 at p. 662 says:

> "So a trespass of a continuing nature, whose constant recurrence renders the remedy at law inadequate unless by a multiplicity of suits, affords sufficient ground for relief by injunction.- - - - - - - - - - So also relief may be granted where, from the nature of the case, it will be impossible to estimate the actual damage which the plaintiff will suffer.

Spelling and Lewis, A Treatise on the Law Governing Injunctions, St. Louis, 1926 pp. 131 and 132 has the following to say concerning interference with peacable possession of property:

> "But injunction will lie to prevent forcible dispossession of, and irreparable injury to, one who has long been in peacable possession and has prima facie right of possession until he may be heard and given opportunity to establish his rights."

The Supreme Court of Canada in Leahy vs. the Town of North Sydney 1906 37 S.C.R. 464 held that an injunction lies to protect a person against trespass on his property. In that case Sedgewick J. stated at p. 475 that "The town of North Sydney was, therefore, a trespasser when it diverted the plaintiff's waters from their natural course and appropriated such waters for the purposes of the town.....". The Supreme Court cited with approval the same principle which was enunciated by the Privy Council in Saunby vs. The Water Commissioners of London 1906 A.C. 110.

This principle was again applied by the Supreme Court in the case of Lethbridge Northern Irrigation District vs. Maunsell 1926 S.C.R. 603. Mignault J. speaking for the majority says that the appellant cannot justify its flooding of the respondent's lands without compensation by claiming to have merely exercised its statutory rights without negligence. By flooding their lands appellant interfered with the respondent's rights over their lands and the latter were entitled to damages. Appellant was in effect considered as a trespasser.

In Garneau vs. Citadel Brick Company 1931 vol. 51 B.R. 9 the Court held that the owner of an immovable whose property

is damaged by blasting and excavating on a neighbouring property is entitled to a possessory action and to an injunction to put an end to the disturbance and be maintained in his possession. At p. 11 the Court says:

> "Considering that the continuation by the company-respondent of its operations in blasting and excavating at the foot of the said bank or escarpement will cause still further great and irreparable injury to the appellant, and he is, therefore, entitled to an injunction restraining the company-respondent from any continuation of the said operations, and that such an injunction may be granted, although, on the institution of the action, no interlocutory injunction was demanded or issued."

In Rochford vs. Philie 1959 B.R. 567 Bissonnette speaking for the majority speaks as follows at pp. 572 and 573:

> "Cette analyse faite du jugement, il reste à considérer le mérite même de l'injonction. Quand l'acte répréhensible que veut empêcher l'injonction se pose sur une violation du droit de propriété, la règle, et les exceptions sont d'ordre mineur, c'est qu'il y a lieu à une demande d'injonction. La raison, outre d'être que "charbonnier est maître chez lui", c'est que cette usurpation peut engendrer un droit réel ou une possession conduisant à une prescription acquisitive. Dans la plupart des cas, cette usurpation requiert une protestation rapide, pour qu'elle soit efficace, comme dans les cas de démolition ou de construction d'un bâtiment ou encore du détournement d'un cours d'eau.
>
> Et cette violation du droit de propriété peut être réprimée par une action possessoire, et en particulier par l'action négatoire de servitude. Or celle-ci comporte une conclusion d'injonction. Ce qui distingue l'une et l'autre, c'est que dans ce dernier cas la recherche de l'animus possidendi ne se pose pas, tandis qu'il peut en être autrement dans le premier.
>
> Si donc l'usurpation n'a qu'un caractère accidentel, involontaire et momentané, comme par exemple, la chute de cailloux à l'occasion d'une construction, il n'y aurait pas ouverture à l'injonction, mais, par contre, si cette violation du droit de propriété accuse un caractère dommageable de permanence et de continuité, seule l'injonction devient le recours efficace, parce que, dans la plupart des cas, une indemnisation en dommages-intérêts ne serait pas un redressement suffisant.
>
> Il a été décidé que "le tort reproché doit être réel au point de ne pouvoir être réparé par une condamnation en dommages-intérêts". Mais encore faut-il que cette action en dommages-intérêts puisse se révéler efficace. Elle ne le sera sûrement pas quand l'usurpateur construit sur mon terrain ou encore démolit ma maison ou quand il s'agit d'un empiétement causant un dommage progressif et continu. Ainsi, en est-il dans l'espèce. Le demandeur a, apparemment, subi des dommages sérieux et l'usurpation qui les cause continue d'exister. Il ne peut réclamer en justice

> que le dommage actuel et le dommage futur qui est certain, mais tout autre dommage aurait à faire l'objet d'autant de poursuites résultant des autres avaries que subiront son fonds de terre et ses bâtiments, qui pourront devenir une perte totale.
>
> Ce qui revient à dire qu'un usurpateur aurait le profit d'une véritable expropriation dans l'illégalité. Je n'accepterai jamais un tel concept juridique, pas plus d'ailleurs que me paraît admissible la fusion qu'a faite le juge, dans un même motif, des art- 406 et 1053 C.C."

In Dumas Transport Inc. vs. Cliche 1971 C.A. 160 the Court of Appeal cited with approval the statement by the trial Judge that the doctrine and jurisprudence recognize that a proprietor has a right to request relief when his rights are being interfered with. Montgomery J. at p. 163 says "Since the decision of the Supreme Court in Canada Paper Co. v. Brown, it cannot be questioned that a householder may obtain an injunction to restrain interference with his peaceful enjoyment of his property and that it is no sufficient defence to establish that the cessation of this interference might cause inconvenience to the defendant, that others have not complained or that the acts complained of were permitted by the local authorities".

There are many other cases cited by petitioners in their factum supporting the principles enunciated above. Since respondents are interfering with, and state that they intend to continue to interfere with the rights which petitioners are exercising in the territory, the latter are entitled to petition this Court for relief by way of injunction.

2. <u>Burden of proof</u>.

The party applying for an interlocutory order of injunction is only obliged to furnish a prima facie proof of the existence of the rights upon which his claim is based.

Kerr on Injunctions, 6th Ed. 1927, on page 2, states:

> "A man who comes to the Court for an interlocutory injunction, is not required to make out a case which will entitle him at all event to relief at the hearing. It is enough if he can show that he has a fair question to raise as to the existence of the right which he alleges and can satisfy the Court that the property should be preserved in its present actual condition, until such question can be disposed of."

High, A Treatise on the Law of Injunctions, 4th ed. vol. 1 p. 13 says:

> ".....even when the legal rights of Petitioners are in issue, an interlocutory injunction may properly be allowed when it is "necessary to preserve their rights in statu quo."

Hanbury, Modern Equity 9th Ed. p. 66 states:

> "..... Petitioner is not required "to prove his case before he can claim interlocutory relief, but only that he has a substantial case to be considered which may very well succeed when it comes to be heard."

Halsbury, Laws of England 3rd Edition vol. 21 p. 364 says:

> "In cases of interlocutory injunction in aid of the plaintiff's right, all the Court usually has to consider is whether the case is so clear and free from objection on equitable grounds that it ought to interfere without waiting for the right to be finally established. This depends upon a variety of circumstances, and it is impossible to lay down any general rule on the subject by which the discretion of the Court ought in all cases to be regulated, it is not necessary that the Court should find a case which would entitle the plaintiff to relief at all events; it is quite sufficient if the Court finds a case which shows that there is a substantial question to be investigated, and that matters ought to be preserved in statu quo until that question can finally be disposed of."

And at p. 365:

> "..... an interlocutory injunction will also be granted to restrain an apprehended or threatened injury where the injury is certain or very imminent, or mischief of an overwhelming nature is likely to be done, especially destructive operations. If the thing sought to be prohibited is in itself a nuisance, or although not in itself a nuisance, will manifestly end in such a nuisance as the Court restrains, the Court will interfere.....".

In Rochford vs. Philie (supra) Bissonnette J. speaking for the majority approved the following statement made by Brossard J. as he then was in Cournor Mining Co. Ltd. vs. Perron Gold Mines Ltd. (1952) R.L. 149:

> "Le premier devoir qui incombe au juge auquel une requête en injonction est adressée, dans l'exercice de son pouvoir discrétionnaire de l'accorder ou de la refuser, est donc de considérer les droits apparents des parties; dans le cas où une enquête a été jugée nécessaire, c'est la preuve, tant littérale que testimoniale, et non, évidemment, les termes employés par le requérant dans sa requête qui établira l'existence ou la non existence d'une apparence sérieuse de droits. Toutefois, cette preuve et les moyens offerts au tribunal ne devront pas aller au delà des faits et moyens allégués dans la requête.

> Comme la demande d'injonction interlocutoire est de sa nature une procédure incidente, le juge auquel elle est adressée n'a certes pas à se prononcer sur le fond même du litige déjà engagé ou qui doit s'engager par une action à être signifiée en même temps que l'ordonnance; il doit, cependant, justifier tout d'abord, sa décision sur une preuve prima facie suffisamment convaincante de l'existence des droits sur lesquels le requérant s'appuie sans toutefois aller jusqu'à affirmer, confirmer ou nier ces droits par son jugement."

In La Commission Royale d'Enquête vs. Boulanger 1962 B.R. 251 Owen J. at p. 254 says that, in respect to the privative clause, petitioner is obliged to show prima facie that the order in council he is attacking is ultra vires.

In Gilford Realties vs. Construction Industry Joint Committee 1962 B.R. 360 the Court of Appeal referred with approval to the statement of the trial Judge who held that it is sufficient to present "une preuve prima facie suffisamment convaincante de l'existence des droits qu'il exerce par sa demande principale".

Cie Cinématographique Canadienne vs. Société Radio-Canada 1965 B.R. 1016 at p. 1017 the Court held:

> "C'était à la requérante à fournir, comme un élément essentiel de sa demande d'injonction, "une preuve prima facie suffisamment convaincante de l'existence des droits sur lesquels elle s'appuie", ce qu'elle n'a pas fait."

In Pérusse et al. vs. Les Comm. des Eccles de St. Léonard 1970 C.A. 324 Brossard J. says at p. 329:

> "Le juge auquel elle est demandée ne peut, soit pour l'accorder, soit pour la refuser, donner à la preuve qui lui est présentée, à ce stade, l'effet d'une preuve finale offerte pour adjudication sur le mérite de l'action; il lui suffit de l'apprécier de façon à être en mesure de décider si le requérant paraît ou ne paraît pas avoir un droit sérieux et valable à faire valoir.....".

Other cases which support this principle are the following namely Leblanc vs. the Borden Company Limited 1961 B.R. 804; Field vs. United Amusement Corporation Limited et al 1971 C.S. 283; Doyon vs. Descent 1961 C.S. 648; Klein vs. Trussart 1963 R.P. 21; La Caisse Populaire Desjardins de Repentigny vs. Tetreault et al 1965 S.C. 115; Flamand vs. Société Radio-Canada 1967 S.C. 424.

In Gagné c. Chagnon, an unreported judgment dated 12th October, 1949, in case No. 275,753 S.C.M. Loranger J. says:

> "Le droit à la propriété ne se paie pas en monnaie, c'est un droit sacré que l'argent ne saurait acheter. La requérante a droit à cette propriété ou non. C'est le fonds qu'elle demande."

As stated above petitioners have shown to the satisfaction of this Court that they have clear rights in the territory and that they have a substantial case to be considered by the Court at the final hearing on the merits. Their obligation therefore to present "une preuve prima facie suffisamment convaincante de l'existence des droits qu'ils exercent par leur demande principale" has been discharged.

3. Serious or irreparable injury.

In the present case the injury which petitioners are suffering and will continue to suffer cannot be easily quantified nor can it be adequately calculated or compensated in monetary terms.

Kerr on Injunctions at p. 17 says:

> "By the term 'irreparable injury' it is not meant that there must be no physical possibility of repairing the injury; all that is meant is that the injury would be a material one and one which could not be adequately remedied by damages; and by the term 'the inadequacy of the remedy by damages' is meant that the remedy by damages is not such a compensation as will in effect, though not in specie, place the parties in the position in which they formerly stood. If the act complained of threatens to destroy the subject matter in question, the case may come within the principle, even though the damages may be capable of being accurately measured. The fact that the amount of damage cannot be accurately ascertained may constitute irreparable damage; ... the question in all cases is whether the remedy by damages is, under the circumstances of the case, full and complete."

High in a treatise on the Law of Injunction, 4th Edition vol. 1 at p. 36 deals with irreparable injury as follows:

> "...by irreparable injury it is not meant that the injury is beyond the possibility of repair by money compensation but it must be of such a nature that no fair and reasonable redress may be had in a court of law and that to refuse the injunction would be a denial of justice."

and at p. 21:

> "If, however, a clear case of irreparable injury is shown as likely to result to complainant unless the injunction is granted, and it does not appear that the issuing of the writ will work any such injury to defendants, the relief will be granted."

In La Laiterie Fortier Ltée v. Borden Company Ltd. 1961 S.C. 513, the Court held that an interlocutory order of injunction should be issued when petitioner shows a clear case and that if the injunction is not issued and the Judge on the merits arrives at the conclusion that respondents acted without right in usurping petitioner's clientèle and should be condemned to the payment of damages petitioner might suffer a very serious prejudice because it would be impossible for the Court to place the parties in the situation in which they were prior to the commission of the illegal acts by respondents. In such a case, a condemnation in damages could not adequately remedy the prejudice suffered.

Dorion C.J. in the unreported case of Cain vs. Sternlieb (which is cited in the case of Laiterie Fortier Limitée and confirmed by the Court of Appeal in 1962 B.R. 440) says:

> "Trop souvent, on a prétendu que, du moment qu'un recours en dommages-intérêts est ouvert à la suite du défaut par une partie de remplir des obligations, ou à la suite de certains faits et gestes posés par elle, le recours en injonction ne serait pas permis. Il ne faut pas oublier un des principes élémentaires de notre droit, que nous trouvons exposé à l'art. 407 C.C., principe qui doit s'étendre non seulement aux biens corporels, mais aussi aux droits que peut avoir une personne. Il n'est pas permis d'enlever un droit à une personne sous prétexte qu'il peut y avoir compensation par une indemnité en argent. Evidemment, il arrive assez souvent que c'est le seul moyen d'indemniser une personne de la perte qu'elle a subie, lorsqu'il a été impossible d'empêcher la perte elle-même: mais toutes les fois qu'il est possible de l'éviter, il est du devoir des tribunaux d'intervenir par le moyen de l'injonction."

In Murray et al. vs. Veilleux 1952 B.R. 64 McDougall J. said at p. 68:

> "Theoretically the imposition of damages would always be a solution of any claim but the legislators very wisely have made provision by art. 957 C.P. (751 Nouveau Code) which recognises the rights of an individual to maintain his status and condition independently of the wishes of his competitors or detractors."

In International Brotherhood of Electrical Workers, Local Union 2085 et al. v. Winnipeg Builders' Exchange et al. 1967 S.C.R. 628, at p. 641 Cartwright J. as he then was says:

> "It is true that an employer whose operations are brought to a standstill by an illegal strike or a union whose employees are rendered idle by an illegal lockout may bring an action for damages or seek to invoke the penal provisions of the Labour Relations Act but the inevitable delay in reaching a final adjudication in such procedures would have the result that any really effective remedy was denied to the injured party."

In Dominion Textile et al. vs. Syndicat Catholique des Ouvriers du Textile de Magog Inc. 1952 B.R. 666 the court held that the prejudice is irreparable when the resulting prejudice cannot be adequately compensated or remedied by a monetary condemnation.

In St. Lawrence Flour Mills Limited vs. Ryan 1957 B.R. 104 the Court held "The burden is on plaintiffs to show prima facie at least that unless the injunction is granted, they will suffer an irreparable injury, i.e. an injury which cannot be adequately compensated by a pecuniary condemnation."

In Guaranteed Pure Milk Co. Limited v. Patry 1957 B.R. 54 Casey J. in speaking of irreparable injury said:

> "My understanding of art. 957 C.P. is that while an injunction may be asked for at anyone of three different stages, it cannot be granted unless is be shown that without it irreparable injury will be caused, that is when compensation in money will not in effect put the parties where they would have been, had the act complained of not been committed.
>
> In this case the burden was on petitioner to show that it had no other reccurse, to show that the injury caused by respondent's violation of his contractual obligation could not be adequately compensated by a condemnation to pay damages. In my opinion, it has not discharged this burden."

In dealing with trespass, High in his Treatise on the Law of Injunctions 4th ed. vol. 1 at p. 662 says that relief may also be granted where, from the nature of the case, it will be impossible to estimate the actual damage which the plaintiff will suffer.

Kerr (1927) at pp. 99 and 100 in speaking of trespass says that a private person who applies for an injunction to restrain

a public company or body from entering illegally on or interfering with his land is not required to make out a case of destructive trespass or irreparable damage.

In the case of Bonnasserre vs. Conseil Des Ports Nationaux et al 1972 S.C. 713 Lalande J. at p. 717 says:

> "Quant aux travaux de 1969, il s'agissait plutôt de travaux de protection des canalisations, préparatoires à ceux d'aujourd'hui. La preuve n'a pas indiqué que le requérant avait lieu de se croire lésé dans ses droits de riverain par ces travaux.
>
> L'on ne peut donc pas faire reproche au requérant d'avoir tardé à se pourvoir en justice pour faire valoir ses droits.
>
> Les intimés ont plaidé que le préjudice que peut subir le requérant est tout à fait réparable et que ce qu'on est convenu d'appeler la "balance des inconvénients" penche du côté des avantages économiques découlant de la nouvelle installation portuaire déjà commencée et de l'intérêt public.
>
> Quand c'est un corps public qui agit illégalement et viole les droits d'un propriétaire particulier, l'équité veut que l'injonction soit prononcée immédiatement."

In Liberty Mutual Insurance Company vs. Collerette 1971 C.A. 668 the Court held at p. 770:

> "L'injonction interlocutoire est une mesure d'exception qui peut être accordée lorsqu'elle est jugée nécessaire pour empêcher que ne soit causé un préjudice sérieux ou irréparable ou que ne soit créé un état de fait ou de droit de nature à rendre le jugement final inefficace. En cette matière, le premier juge jouit d'une grande discrétion qu'un tribunal d'appel doit respecter à moins qu'il soit convaincu qu'il y a eu abus ou mauvais usage de cette discrétion. En effet, le premier juge a l'avantage de voir les témoins et il est généralement mieux en mesure de peser les inconvénients qui peuvent résulter de l'émission ou de la non-émission d'une injonction interlocutoire. Ces principes se dégagent des arrêts de notre cour dans Guaranteed Pure Milk CO. Ltd. v. Patry et Leblanc v. The Borden Company Ltd. où nous avons refusé d'intervenir et respecté la discrétion du premier juge."

In an unreported case Jonergin Co. Inc. vs. Les Imprimeries E.H.B. Ltd. bearing number 791365 of the records of this Court Legault J. granted the petition for interlocutory injunction holding that the damages could be irreparable since it was impossible to evaluate them. This judgment, rendered on 27 May 1970, was confirmed by the Court of Appeal file number 13448 (1972).

In the opinion of this Court the requirements of art. 752 C.C.P. have been fulfilled. In a previous part I discussed the damages which will occur to the flora and fauna. These damages will be great. It is clear that if the works continue, irreparable harm and injury will be caused to petitioners. It will not be possible to bring back to life the fish and animals which will die, nor will it be possible to bring back the vegetation which will be destroyed. The proof has shown that it will take many, many years for the flora to re-establish itself. In addition, if this Court were to allow the works to continue, a factual situation will soon occur which will render any final and permanent injunction ineffectual. It would then be physically impossible to put the parties in the position in which they presently are. In view of the nature and extent of the works which are presently going on and which are projected for the coming months, the project will become irreversible by the end of the current year (Amyot and Skinnarland). I have no doubt that, on the other hand, the injuries which respondents will sustain if the injunction is issued are not in the nature of irremediable damage.

4. Statu quo.

The general rule is to allow the parties to remain in their respective positions until such time as their respective rights have been determined by final judgment.

The doctrine and the jurisprudence on this subject is as follows.

High in a Treatise on the Law of Injunctions 4th ed. vol. 1 p. 7:

> "The sole object of an interlocutory injunction is to preserve the subject in controversy in its then condition, and, without determining any question of right, merely to prevent the further perpetration of wrong or the doing of any act whereby the right in controversy may be materially injured or endangered."

and at p. 10:

> "And by the status quo which will be preserved by preliminary injunction is meant the last actual, peaceable, noncontested condition which preceded

> the pending controversy, and equity will not permit a wrong-doer to shelter himself behind a suddenly and secretly changed status, although he succeeded in making the change before the hand of the chancellor has actually reached him. And where, before the granting of the injunction, the defendant has thus changed the condition of things, the court may not only restrain further action by him, but may also, by preliminary mandatory injunction, compel him to restore the subject-matter of the suit to its former condition. And in so doing the court acts without any regard to the ultimate merits of the controversy."

and at p. 13 he goes on to say:

> "Where, however, the parties are at issue upon a question of legal right and it is necessary to preserve their rights in statu quo until the determination of the controversy, an interlocutory injunction may properly be allowed."

The English and Empire Digest vol. 28 (2)p. 971:

> "On an interlocutory application for an injunction the Court will only act prospectively, and with a view to keep matters in statu quo, and will not, unless in a very special case, grant the order in such a form as indirectly to compel some positive act to be done by the party enjoined."

Spelling and Lewis in a Treatise on the Law Governing Injunctions 1926 p. 34 states that the purpose of an injunction is to grant preventive or protective relief.

Le Comité conjoint de l'industrie de la construction de la région de Montréal vs. Sicotte Transport Ltée 1965 B.R. 564:

> "In dealing solely with the question as to the issue of an interlocutory injunction this court should bear in mind that the trial judge was exercising a discretion and that petitioner must show that the trial judge committed an error in exercising this discretion. It should also be remembered that one of the purposes of an interlocutory injunction is to maintain the statu quo between the parties until their respective rights have been determined."

In carrying out the works which have thus far been executed respondents have succeeded in changing the statu quo which existed between the parties at the time the proceedings were instituted. Furthermore respondents declare that they intend to continue with the works in accordance with their schedule of production. In a case of this nature, the continuation of the works will lead to a factual situation which cannot be properly and effectually remedied by a final judgment. Having considered the evidence I have

no doubt that it would be preferable for the parties to remain in their respective positions until such time as their rights have been finally determined by the action on the merits.

5. Balance of convenience.

According to the existing doctrine and jurisprudence, balance of convenience will not be considered when the person seeking an injunction has a clear right. It is only when petitioner's right is doubtful that balance of convenience will be considered. The logic of this rule is that when the right is clear it is preferable that the injunction issue and the parties left in the situation in which they are then in. The person interfering with their right will then be obliged to extricate himself from the difficulties resulting from his own action.

Kerr says that balance of convenience is taken into consideration only in doubtful cases. In speaking about the protection of legal rights to property he says at p. 24 of his work on Injunctions 6th Ed. 1927:

> "In doubtful cases where the question as to the legal right is one on which the Court is not prepared to pass an opinion, or the legal right being admitted the fact of its violation is denied, the course of the Court is either to grant the injunction pending the trial of the legal right, or to order the motion to stand over until the legal right has been tried. In determining which of these two alternatives it shall adopt, the Court is governed by the consideration as to the comparative mischief or inconvenience to the parties which may arise from granting or withholding the injunction, and will take care so to frame its order as not to deprive either party of the benefit he is entitled to, if in the event it turns out that the party in whose favour the order is made shall be in the wrong. In doubtful cases, if it appears, upon the balance of convenience and inconvenience, that greater damage would arise to the defendant by granting the injunction in the event of its turning out afterwards to have been wrongly granted, than to the plaintiff from withholding it in the event of the legal right proving to be in his favour, the injunction will not be granted, but the motion will be ordered to stand over until the hearing. If, on the other hand, it appears that greater damage would arise to the plaintiff by withholding the injunction, in the event of the legal right proving to be in his favour, than to the defendant by granting the injunction, in the event of the injunction proving afterwards to have been wrongly granted, the injunction will issue. The burden lies upon the plaintiff, as

> the person applying for the injunction, of showing that his inconvenience exceeds that of the defendant. He must make out a case of a comparative inconvenience entitling him to the interference of the Court."

In the first part of this section I referred to Kerr, who in dealing with trespass enunciates the following rule at p. 92:

> "The jurisdiction of the Court by injunction in cases of trespass is in aid of the legal right. If the right at law is clear and the breach clear, and serious damage is likely to arise to the plaintiff if the defendant is allowed to proceed with what he is doing or threatens to do, an injunction will be granted pending the trial of the right. But if the right at law is not clear or the breach is doubtful, and no irreparable injury can arise to the plaintiff pending the trial of the right, the case resolves itself into a question of comparative convenience."

High in his Treatise on the Law of Injunction 4th Edition Vol. 1 in the chapter dealing with the general nature of the writ says at p. 19:

> "Where the legal right is not sufficiently clear to enable a court of equity to form an opinion, it will generally be governed in deciding an application for a preliminary injunction by considerations of the relative convenience and inconvenience which may result to the parties from granting or withholding the writ. And where, upon balancing such considerations, it is apparent that the act complained of is likely to result in irreparable injury to complainant, and the balance of inconvenience preponderates in his favor, the injunction will be granted."

In speaking about infringements of Patents he says at p. 907:

> "While considerations of the relative hardship and inconvenience to the respective parties, by granting or withholding the relief, may properly be taken into account in determining the application, yet where the right is well established and the violation clear, neither considerations of public or private convenience, or of hardship to the defendant, will prevent the court from interfering."

And finally in discussing possession he says at p. 336:

"Notwithstanding the general rule as stated in the preceding section, by which courts of equity refuse to interfere with possession before the right is determined at law, if defendant's possession is but an interruption of the prior possession of complainant whose right is clear and certain, an injunction may be allowed without compelling complainant to establish his title by an action at law. The interference in such case rests, as in cases of nuisance, upon a clear and certain right to the enjoyment of the subject in question, and an injurious interruption of that right which upon just and equitable grounds ought to be prevented."

Ashburner Principles of Modern Equity 2nd Edition p. 343 says:

"Where the Court has jurisdiction to grant an injunction, the question whether it will grant it or not is a question of discretion. It is not bound to grant an injunction merely because A threatens and intends to violate a legal right of B. But the tendency of the decisions in recent years is to limit the discretion of the Court, and it may be laid down that every threatened violation of a proprietory right which, if it were committed, would entitle the party injured to an action at law, entitles him, prima facie to an injunction, and the onus is upon the Defendant of rebutting the presumption in favour of an injunction, by showing that damages will be an adequate compensation to the Plaintiff for the wrong done him, or that on some other grounds he is not entitled to equitable relief."

Corpus Juris Secundum vol. 43, p. 463 states:

".....and it has been held in numerous decisions that, if it is clear that there is a violation of a right of complaint and his injury is regarded as irreparable and his other remedies inadequate, he is ordinarily entitled to an injunction,.."

In Lido Industrial Products Limited vs. Melnor Manufacturing Limited 1968 Ex. C.R. 438 the Court held that since the case was one of piracy of plaintiff's rights without colour of right, balance of convenience should not been taken into account. On appeal to the Supreme Court of Canada 1968 S.C.R. 769 the Court held that the balance of convenience should be considered only when very serious doubts exist as to plaintiff's right. Since the rights in that case were clear, balance of convenience did not come into play.

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In Rudy Krall & Sons Ltd. vs. Quebec Eggs for Consumption Producers Federation et al., 1972 C.A. 882 the Court after referring to Kerr on Injunctions says:

> "Quant à la question de la balance des inconvénients, il ne s'agit pas d'un doubtful case ni d'une question on which the Court is not prepared to pass an opinion: par ailleurs the fact of its violation est établi.
>
> La cour est donc d'opinion que, dans les circonstances, le juge de première instance, cela est dit en toute déférence, n'aurait pas dû se baser uniquement sur le poids des inconvénients pour décider de cette injonction."

City of Outremont vs. Tennex Inc. S.C.M. 05-000881-72.

> "- In the case of a flagrant violation of law, the balance of convenience will not be considered."

In Ferguson and Lawson v. Paterson Steamships Ltd. 1950 4 D.L.R., Ferguson J. of the Ontario High Court at p. 528 cites case law in support of the following principles:

> "On an application for an interlocutory injunction the plaintiff must show a serious question to be tried and that on the facts the plaintiff is probably entitled to relief or he must show that there is a substantial question to be investigated and that matters ought to be maintained in statu quo until the question can finally be disposed of. And if the right of the plaintiff is not clear and the status quo should be maintained, the Court will be guided by the balance of convenience."

In Toronto Transit Commission v. Aqua Taxi Ltd. et al, 1955 O.W.N. 857 Moorhouse J. of the Ontario High Court at page 860 held:

> "Where the legal right is not sufficiently clear to enable the Court to form an opinion it will generally be governed in deciding an application for an interlocutory injunction by consideration of the relative convenience and inconvenience which may result to the parties from granting or withholding the order....."

In Francklyn vs. Peoples Heat & Light Co., 1899 N.S.R. 44, at p. 59 the court held:

> "There was a contention made as to the balance of convenience, but that is only to be considered when the right of law, or the fact of its violation, is doubtful, and does not arise in this case where the law is in favour of the plaintiff, and its violation admitted."

In Attorney General vs. Ryan 1888 5 Man L.R. 81, at p. 111 the Court said:

> "Nor can the Court in such a plain case of right consider the inconvenience to the defendants or those whom they claim to represent from the granting of the injunction." Its proper course, as pointed out by Lord Chancellor Hatherley in Attorney-General vs. Colney Hatch, L.R. 4 Ch. 147, "is to ascertain the exact state of the law which regulates the relations of parties, and having done so, to proceed to act upon it without reference to the difficulties of the case on the part of those against whom it is obliged to decide, leaving those parties to relieve themselves as best they can from the positions in which they have placed themselves, and, if there be no other mode of escape, to cease to do the acts which occasion the wrong."

In McLaren vs. Caldwell, 1880 5 O.A.R. 363 at p. 367 the Cour decided as follows:

> "- The doctrine of balance of convenience will only be considered when the legal right is not sufficiently clear to enable the Court to form an opinion."

I will now consider whether the doctrine and jurisprudence cited above is applicable to the present proceedings.

Respondents plead that balance of convenience is in their favour on the ground that they will suffer a considerable monetary loss if an interlocutory order of injunction suspending the works is issued. Petitioners in reply state that balance of convenience should not be considered in a case of this nature. Under reserve of this argument they add that the sums claimed are grossly exagerated, and even if balance of convenience were to be considered, it should be resolved in their favour. It is my intention to immediately consider the first proposition submitted by petitioners because if I accept this proposition, it will be unnecessary for me to examine the other arguments submitted by both parties on balance of convenience.

The doctrine and jurisprudence recognize that balance of convenience will not be taken into account when the person seeking to enforce a right has a substantial case to present to the Court and it appears that his right is clear and certain. It has been amply demonstrated that petitioners have clear rights of possession and occupancy. Their possession, occupancy, and use of the land is

measured in terms not of years but of centuries. To use the words found in Kerr (supra) this is not a doubtful case "where the question as to the legal right is one on which the Court is not prepared to pass an opinion." Respondents have interfered with and violated the rights which petitioners have been exercising. According to Ashburner a threatened violation of a proprietary right entitles the party injured to an injunction. In the present case there is more than a threat. Interference is presently taking place and furthermore respondents state thay they intend to continue carrying out the works necessary to complete the project. Applying the principle enunciated by High, since petitioners' right is clear and certain, the injurious interruption of that right must be stopped. The evidence permits me to form an opinion. I do not have the slightest doubt that petitioners have established a strong prima facie case. I am convinced that they have a clear right to an interlocutory order of injunction.

In a case of this nature the sums of money expended, even if substantial, must not be permitted to cloud the issues. The nature and extent of the works presently going on and which are scheduled for the next few months have been described in detail elsewhere in this judgment. The proof has convinced me that if these works are allowed to continue, a factual situation will soon occur which will render any final judgment ineffectual because it will then be impossible to put the parties in the position they would have been in had the works not been carried out. To put it another way, a continuation of the works will undoubtly lead to a fait accompli.

Furthermore if I were to consider balance of convenience in the present case, I would establish a principle which would lead to strange consequences. It would permit a person to change the statu quo prior to or pending the hearing and subsequently plead balance of convenience. I cannot give effect to such a proposition.

There is one final matter which requires consideration. Respondents of their own accord started work on the project notwithstanding the opposition expressed by petitioners. Even after

the present proceedings were instituted, respondents continued with the project and expended large sums of money. This was a most unfortunate decision. Respondents knew that the Indians and Eskimo were in possession of the territory and the lands adjacent thereto. They also knew that the Indians and Eskimo were occupying and making use of the land. This situation was not forced upon them. They took the risk of proceeding with the work. A more prudent person would have awaited the decision of the Court.

In l'Association des Propriétaires des Jardins Taché Inc. et al vs. Les Entreprises Dasken Inc. et al 26 D.L.R. (3d) 79 the Supreme Court of Canada refused to take into consideration the monetary loss suffered by a contractor who erected apartment buildings in contravention of a zoning by law. Pigeon J. speaking for the majority says at p. 91:

> "In these circumstances the extent of the loss involved in demolition order depends largely on the decision of the owner to take the risk of going ahead with the work after the protest, the institution of proceedings and the motion for an injunction."

Although in the case of Les Entreprises Dasken Inc. the appeal was from a judgment on the merits, I see no reason why this principle should not be applied to the present case.

I therefore conclude that balance of convenience cannot be considered by the Court in the present case. Petitioners' objection to all the proof dealing with balance of convenience is maintained.

6.- A review of the proof on balance of convenience

a) general

However in view of the importance which respondents attach to the proof adduced on this particular subject, the substantial sums of money mentioned by the witnesses, and the time and energy spent in bringing this evidence before the Court, I intend to deal briefly with the salient portions of the proof on balance of convenience. It is also important so to do in order that these matters be placed in their proper and true perspective. In the first part of this judgment, I explained the difference in the principles which must be followed by a judge hearing an application for an interlocutory order of injunction and those which are followed by a judge hearing the application on the merits. In the latter case the injunction, if issued, becomes a final and permanent one. In the former case the injunction, if issued, simply maintains the status quo until the hearing on the merits takes place. This Court is only permitted to take into consideration the damages which will be suffered by the parties as a result of the issue, or the refusal to issue, an interlocutory order of injunction.

For the reasons given above, all the proof made by respondents concerning damages resulting from a permanent stoppage of the works are not relevant to the present issue.

b) respondents Development Corporation and Energy Corporation

In presenting proof on damages respondent Development Corporation and respondent Energy Corporation filed certain documents as exhibits I-170 and I-172. Whilst Stewart was testifying on certain entries appearing in these exhibits, it was discovered that the entry of $18,500,000 should not be included in the damages resulting from a delay, because this amount represents claims for work done prior to the preparation of these exhibits. Stewart, therefore, stated that the said sum should be considered as a capital expenditure and added to the cost of the project. To give effect to this change the said exhibits were replaced by new exhibits numbered I-170A and I-172A respectively. It is therefore

necessary to keep these changes in mind when reading the testimony of the witnesses who testified prior to the production of exhibits I-170A and I-172A. In my review of the testimony of the witnesses I give effect to these changes.

I will now consider the proof concerning the damages resulting from a temporary suspension of the works. Respondents produced figures calculated on the basis of a delay of one year, two years, and three years. Exhibit I-172A page 2 contains a synopsis of the damages which will be suffered by both Development Corporation and Energy Corporation if the project is temporarily delayed. I intend to refer only to the figures in the first column dealing with a delay of one year. The reasoning which I will apply thereto is applicable to the other two columns dealing with delays of two years and three years respectively.

The first entry, in the amount of $58,501,000 is described as "travaux d'infrastructure". Bordeleau at p. 101 of the transcript of his testimony of 24 April says that this term includes only the construction of roads and airports.

The break-up of the said amount of $58,501,000 is set out in exhibit I-170A page 1 section 2. The three amounts there in mentioned are again broken up on pages 2, 3, 4 and 5 of the same exhibit. The first item amounting to $25,294,000 represents "coûts de désengagement" which is further broken down into the items mentioned on page 2. Bordeleau described these claims as follows:

a) Demobilization $4,185,000. This represents Bordeleau's own estimate of the sums which all the contractors will claim for being obliged to take their equipment out of the territory before the contract is completed (pages 102 and 104 of his testimony)

b) Loss of profit $11,040,000. At pages 106 and 107 of his testimony Bordeleau says a contractor, in agreeing to do the work for a fixed price, expects to make a certain profit on the contract. If the contract is discontinued prior to completion, he will not reap the profits which he would have made if he had been allowed to complete the work. He arrives at this sum by taking 10% of the residual value of the portion of the contract not yet executed.

c) Loss on material $3,870,000. Bordeleau says this amount represents principally the damages which the contractors may suffer because they will be unable to use the fuel which they purchased and stored in the territory.

d) Interest and insurance $2,750,000. At page 108 the same witness says that this amount represents sums which the contractors will expend to maintain their unproductive equipment on the site if the works are suspended.

e) Care-taker costs $1,100,000. Bordeleau says this sum will be expended by the contractors who will be obliged to pay personnel to guard the equipment.

f) Not recoverable $1,249,000 representing the cost of materials purchased by contractors for the construction of bridges. Bordeleau states that this material, such as steel, cannot be used elsewhere.

g) Winter roads $1,100,000 representing the cost of building a winter road to permit the contractors to withdraw from the territory.

The second item in exhibit I-170A page 1 section 2 amounting to $27,520,000 represents the cost of starting the works after a suspension. At pages 1, 12 and 114 Bordeleau states that, if the works are suspended, it will be necessary to enter into new contracts with the contractors who will charge approximately 2½ more. 12½% of the balance of the works remaining to be executed as of 28 February 1973 amounts to $27,520,000. At page 112 he says "les coûts de redémarrage consistent essentiellement à re-préparer de nouveaux contrats et puis remobiliser de nouveaux entrepreneurs pour la balance des travaux".

The third item in the amount of $5,687,000 represents escalation costs of 4% per annum calculated on the combined total of the value of the remaining works and the costs of starting the work after a suspension. At page 113 he says "Si on les complète dans un, bien il faut prévoir ces montants-là devront être majorés d'environ 4% qui est l'escalade normale appliquée".

The second entry on page 2 of exhibit I-17[illegible] to $2,664,000 is described as construction contracts.

damages which Energy Corporation will suffer if the project is delayed for one year. This amount is broken down at page 6 of exhibit I-170A. At page 115 of his testimony Bordeleau says that he arrived at these figures by using the same methods of calculation used in arriving at the sum of $58,501,000 referred to above. The following is an extract of his testimony:

Q "Alors comme dans le cas précédent, vous ajoutez aux travaux exécutés le coût des engagements en autant que l'arrêt est concerné, et vous ajoutez les pertes de désengagement, coûts de re-démarrage et escalades en autant que les retards d'un an, deux ans et trois ans sont concernés?

R Précisément."

The third entry in the amount of $9,174,000 represents purchase contracts by Energy Corporation. The same witness states that these amounts are treated differently because it is very difficult to establish a demarcation line between what has been executed and what remains to be executed. He gives an estimate of what can be recuperated, deducts this amount from the total value of all merchandise which has been contracted for, and arrives at the amount mentioned. This applies to trailers, equipment, and the other items mentioned.

The fourth entry in the amount of $837,000 refers to preliminary studies. This amount consists of the three items set out in exhibit I-169. The first item $320,000 represents the cost of demobilizing the personnel involved in preliminary studies. The second item in the amount of $17,000 is the cost of storage and maintainance of tools, machinery and equipment. The cost of safeguarding the installations and equipment amounts to $500,000.

The fifth and last entry in the amount of $16,262,000 represents interest on monies already spent. It is interesting to note that Stewart at page 22 of his testimony says:

R "L'item 5 a été calculé sur la base des dommages si le projet est arrêté, c'est-à-dire $191,320,000 et ça a été calculé au taux de 8.5 par année, composé une fois par an".

Skinnarland examined the documents filed by respondents and concludes that, in order to minimize damages, it is prefe-

rable to complete the road from Matagami to LG-2 airport and cancel the road contracts from Fort George to LG-2. He makes this affirmation because the road work was, at the time of his testimony, mostly pioneered through to LG-2. Based on this assumption he prepared exhibit P-124 a document based on the exhibits I-169, I-170A, and I-172A. His calculations are therefore founded on the calculations made in the latter exhibits simply repricing the estimates for this particular purpose. A comparison of exhibit I-172A page 2 with exhibit P-124 page 3 discloses that the total damages if the project is delayed for one year fall from $87,438,000 to $37,731,000. The first entry "travaux d'infrastructure" becomes $13,047,000. The component parts of this last entry are all reduced by substantial sums. Of the contracts mentioned on page 3 of exhibit I-170A only two would have to be cancelled namely those of Saint-Laurent and Francon, thereby reducing the three items of exhibit I-170A page 1 section 2 from $25,294,000, $27,520,000, and $5,687,000, to the sums set out in exhibit P-124 page 4 section 2 namely $5,550,000, $6,213,000, and $1,284,000, respectively. The second entry relating to construction contracts with Energy Corporation is reduced by the witness from $2,664,000 to $905,000 for the same reasons. With respect to the third entry, purchase contracts, witness says that if the work is suspended, the materials can be stored and protected at a cost of $1,000,000 per year. He therefore substitutes this latter figure for the sum of $9,174,000. In so far as the fourth entry "preliminary studies" is concerned, the need for security arrangements and protection becomes less and the amount is therefore reduced from $837,000 to $487,000. In so far as the fifth and last entry is concerned, witness, by using the same methods which were employed by respondents in the preparation of exhibits I-170A and I-172A, calculates interest at 10% on the total sum which will have been expended if all the contracts are completed. The interest is therefore higher and the amount of $16,262,000 is replaced by the amount of $22,292,000.

I will now analyse the figures referred to above.

Those who prepared the estimates took for granted that both Development Corporation and Energy Corporation are obliged to disburse the sums mentioned in the first two entries of exhibit I-172A page 2 in the amounts of $58,501,000 and $2,664,000 to the contractors as damages. In order to determine whether Development Corporation and Energy Corporation are obliged by law to pay such damages to the contractors, it is necessary to refer to the document produced as exhibit P-30B. On April 25th, the parties admitted that exhibit P-30B is the type of contract which was entered into between Development Corporation and/or Energy Corporation on the one part and each of the contractors executing work in the region on the other part. Therefore, the legal relationship existing between the parties concerning suspension of works or cancellation of contract is governed by the conditions contained in said exhibit. The clauses to which reference will be made are common to all these contracts and both parties are legally bound to carry out the conditions therein contained. Whenever I use the term employer in this section I mean Development Corporation, Energy Corporation, or Hydro-Quebec as the case may be. Let us now turn to an examination of the relevant clauses contained in exhibit P-30B. Since exhibit P-30B is a facsimile of the contracts entered into with the contractors the term Hydro Quebec whenever it appears therein will be replaced by the term employer. Under section D article 49 the employer reserves the right to suspend the work at any time. If the suspension applies to the works as a whole and is for a period exceeding 90 days the contractor is entitled to cancel the contract. The employer shall then be obliged to pay any additional costs incurred by the contractor as a result of the suspension, such costs to be determined in accordance with section D article 53 dealing with determination of prices. The respective rights of the parties in the event of cancellation are set out in section D article 50. Under this article the employer reserves the right to cancel the contract at any time. In case of cancellation the employer shall pay the contractor an amount equal to the contractual value of the work performed and the materials supplied. The contractual value of the work performed and the materials supplied shall be determined in accordance with the said article 53. It is further provided that in

no case of cancellation will the employer pay the contractor an amount greater than the value of the contract on the date of cancellation nor will the employer pay any compensation for loss of gain or anticipated profits. Said article 53 states that whenever it is necessary to determine prices for work and materials, the prices will be determined as follows:

> "Each price shall be determined in conformity with one of the rules a), b), or c) hereunder, each rule having precedence over the next one in the order in which they appear below.
>
> Each price shall be established
>
> a) by application of the appropriate unit or lump sum prices appearing in the contract or in the absence of such prices,
>
> b) by comparison with the most similar work of the contract, or
>
> c) if a certain price cannot be determined by one of the methods stipulated in paragraphs a) and b) above, the price shall be agreed upon by the Contractor and the Engineer.
>
> However, Hydro-Quebec reserves the right in all cases to pay for all or any part of the work, materials, facilities, equipment or charges not originally included in the contract at prices determined on a cost-plus basis as defined in the article herein entitled "COST-PLUS BASIS"."

These clauses are clear and precise. Whether there is a suspension of work, or a cancellation of contract, no damages are payable by the employer. The contractor in such cases only receives the value of the work done and the materials supplied. Consequently neither Development Corporation nor Energy Corporation is obliged to disburse the damages claimed under the first two entries of exhibit I-172A page 2 amounting to $58,501,000 and $2,664,000 respectively. I wish to make it clear that I express my opinion on the interpretation of these particular clauses for the sole purpose of dealing with the present application for an interlocutory order of injunction.

As an example of the errors made by the witnesses testifying on damages, I refer to the following statement made by Bordeleau when speaking about the damages which will be incurred by Energy Corporation:

R "Alors, ce que je tente d'expliquer ici là, c'est que et des hélicoptères et des avions seraient utilisés à partir du moment où les travaux seraient discontinués jusqu'à la date où les travaux de désengagement ou de démobilisation soient terminés. Alors, ça implique le transport du personnel des entrepreneurs, par exemple, le transport du maximum de marchandises possible, de petite marchandise, des livres, les filières, les heu, et puis là, l'organisation de chaque enclos de chaque entrepreneur.

Q Et tout ça, ça va coûter $1,700,000.?

R C'est ce que j'ai estimé, oui, $1,700,000."

Respondents made an error in pretending that the employer is obliged to supply such a service. The contract, exhibit P-30B clearly shows that these expenses must be borne by the contractor.

To give another example, witnesses testifying on behalf of respondents referred to the obligation of Development Corporation and Energy Corporation to reimburse the contractor for the amounts which he will be obliged to pay to preserve his materials and equipment during the suspension period. Section D article 49 provides that the contractor shall take all measures he deems necessary for the preservation of his facilities and equipment during the suspension period, and shall also take all measures deemed necessary by the engineer for the preservation, during the suspension period, of the work done and material supplied. Section D article 50 dealing with cancellation of contract stipulates that the contractor shall take all measures deemed necessary by the engineer for the preservation of the work done and the material supplied. It is clear therefore that the obligation referred to must be borne by the contractor and not by the employer.

In addition there is no proof before the Court that, in the event of a suspension of the works, the contractors will prefer to cancel the contract rather than await the final judgment. I have shown that, in the event that the contractors do not cancel their contracts, there will be little, if any, damages caused to Development Corporation and Energy Corporation. The contractors under the contract will be obliged to defray all the costs resulting from the suspension. If however they elect to cancel, the additional amounts which may become payable by Development Corporation and Energy Corpo-

ration consist of the normal escalation in the cost of labour and materials, and the cost of re-starting the project.

It is also interesting to note that witnesses testifying on behalf of respondents admitted that there is perhaps no legal obligation to pay. The following is an extract from page 125 of Bordeleau's testimony of 24 April.

Q "Oui, mais s'il pose pas ces pieds cubes de matériaux de gravier, il peut pas, il a aucune raison, selon le contrat toujours, de récupérer des $11,000,000.00; c'est sa perte, c'est pas la vôtre?

R C'est sa perte, oui. Maintenant, un contrat de construction, c'est une entente de bonne foi faite entre deux parties....."

Stewart, treasurer of Development Corporation and of Energy Corporation speaks of a legal and moral obligation. I quote from page 38A of his testimony of 25 April:

Q "Donc, ce sont des sommes que la société jugerait à propos de donner aux contracteurs advenant le cas que les travaux sont arrêtés?

R Il faut peut-être bien préciser que les sociétés ne donneraient rien de leur propre gré mais les processus de résiliation d'un contrat entament des obligations morales et parfois légales. Et, à mon avis, ces pertes de bénéfice englobent cette partie-là.

Q Des obligations morales et des obligations légales?

R Oui, plutôt légales que morales."

And again at page 41:

Q "Comment pourriez-vous arriver avec un chiffre de $11,000,000. à ce moment-là?

R On arrive parce qu'on a fait assez soigneusement que possible en tenant compte de toutes les circonstances que nous pensions pourraient arriver et nous avons deviné, deviné, estimé mais deviné c'était peut-être un meilleur mot, le montant qu'on devrait, le montant minimum qu'on devrait verser.

Q Moralement et légalement.

R Plutôt légalement que moralement. Il y a malgré tout, chaque clause n'est pas écrite dans un contrat, il y a toujours un petit élément de moral."

The third entry concerns purchase contracts. According to respondents the damages relating to this entry are $9,174,00 whereas according to Skinnarland this amount drops to $1,000,000.

The fourth entry represents interest on the sum expended for preliminary studies concerning several projects including th

La Grande complex. The capital sum upon which interest is calculated includes an amount of $24,713,458 expended in researching the Nottaway, Broadback, Rupert project which has not yet commenced. It also includes lesser sums expended for the Eastmain project and the Chutes Rouges project. These sums are all set out in exhibit I-168. Dube, who produced this exhibit, says that the Chutes Rouges project is no longer spoken of. The Nottaway, Broadback, Rupert project is for the moment suspended because a decision was taken to proceed with the complex La Grande. When the latter is completed, it may become necessary to go ahead with the other project and in that event the preliminary studies which cost $24,713,458 will become useful. Even if respondents contention is valid, the only capital sum which should form part of the said entry is the amount expended for the La Grande project plus a proportionate portion of the expenses common to all the projects. It would appear from a rough calculation that only $22,000,000 relates to the La Grande project. This is 40% of the capital sum used to calculate interest. On the basis of such a calculation, the fourth entry becomes approximately $337,000. If we use the figures submitted by Skinnarland, the item falls to a little less than $200,000.

The fifth entry consists of interest on capital sums expended for works executed prior to 28 February 1973.

I see no valid reason why the sums claimed in the fourth and fifth entries should be taken into account in considering balance of convenience. Both items should be entirely deleted.

Furthermore Bordeleau at page 177 of his testimony states that the damages will diminish as the value of the works executed increases. The damages set out in the exhibits filed by respondents were calculated as of 28 February 1973. Spending on the roads since that time is between 9 to 10 million a month. At the time the case was taken under advisement an additional 40 million dollars had been spent. The amount shown in the 9th column of exhibit I-167 increases by the said sum monthly, and, as the said sum increases, the damages shown on exhibits I-172A and I-170A will be reduced considerably.

Some witnesses state that the roads will not be of any use unless the project is completed. However Bordeleau and Skinnarland state that the roads can be used like any other road in the Province. The following is an excerpt taken from page 175 of Bordeleau's testimony of 24 April:

Q "Mais il est possible, n'est-ce pas, d'utiliser la route comme on utilise d'autres routes dans la province de Québec pour d'autres fins que des fins hydro-électriques?

R Absolument, il n'y a rien de particulier à cette route-là, c'est une route comme n'importe quelle route. Elle peut servir pour n'importe quelle sorte de fins.

According to Cayer a major item will be the maintenance of the roads during the suspension period. He does not mention any specific amount. However the contract is not silent on this point. Exhibit P-30B section f, article 18 specifically states that:

> "Starting November 1, 1973, snow removal, winter and summer maintenance of work executed shall be the Contractor's responsibility until the termination of the work as a whole. The road shall then be and remain in a state such as to permit safe traffic conditions, anytime, for any light or heavy wheel mounted vehicle and that, until the termination of the work."

It is therefore clear from this analysis that the damages resulting from a temporary suspension of the works will be very small.

A further observation should be made concerning the completion of the airports and the roads. Respondents chose 28 February 1973 as the cut off date for the evaluation of damages. However the Court is not restricted to this particular date because witnesses produced by both parties spoke about works which were being carried out subsequent to the said date. The evidence disclosed that work was proceeding in accordance with the schedule of production and was still in progress in June when this case was taken under advisement. Bordeleau states that spending on the roads since 28 February is proceeding at a rate of approximately $10,000,000 a month, adding that, as the total sums expended increase, the damages claimed will be reduced considerably. The airports at LG-2 and at Fort George were scheduled for completion at the end of

August 1973 (Skinnarland and exhibit P-28 plate 1). Certain miscellaneous works on airports will be completed by the end of September 1973 (exhibit I-174). In so far as the roads are concerned, witnesses state that the access road from Matagami to LG-2 will be "carrigeable" by 1 November 1973, and completed for all traffic by 1 April 1974. Reference to the testimony of the witnesses and exhibit I-174 disclose that the road from Fort George to LG-2 was scheduled to become "carrigeable" by 1 August 1973 and to be totally completed one year thereafter. It is clear therefore that all the roads will be completed or will become "carrigeable" by 1 November 1973. By this latter date only two major bridges will remain to be completed (exhibit I-174). The term "carrigeable" is defined as follows in exhibit P-30B section E article 3 (a):

> "On November 1, 1973 the road shall be "carrigeable" that is shall allow a continuous and safe passage-way to all service vehicles on wheels, heavy or light, all along the project. The basic criterion is a loaded float truck (50T) moving at 15 m. p. h."

In addition to the foregoing Bordeleau at page 174 of his testimony says that if the roads are completed prior to the issue of an interlocutory order of injunction, no damages will be incurred.

c) Respondent Hydro-Quebec

Let us now turn to an examination of the monetary damages which Hydro-Quebec alleges it will suffer if the project is delayed. Damages are based firstly on loss of interest on sums invested by Hydro-Quebec in the capital stock of Energy Corporation, and secondly on the additional costs resulting from proceeding with an alternate program.

Hydro-Quebec claims loss of interest on the amounts invested in the capital stock of Energy Corporation only and not on the sums advanced to the latter. The following is an extract from page 42 of the transcript of Lafond's testimony:

Me Boulanger: "Dans I-186 il est pas question d'intérêts sur les sommes avancées Votre Seigneurie. C'est déjà réclamé ça par la Société d'Energie qui a une dette vis-à-vis de l'Hydro-Québec.

R

L'entête de l'exhibit I-186 se limite au capital-actions."

Here again I can find no valid reason why interest on sums invested by Hydro-Quebec in the capital stock of Energy Corporation should be taken into account in considering balance of convenience. The sums claimed are, to say the least, remote from the issues involved. Lafond, treasurer of Hydro-Quebec, recognized that the interest claimed was quite remote in time. At page 4 of his testimony he says that the return on the capital sums invested by Hydro-Quebec in the capital stock of Energy Corporation will only be received by Hydro-Quebec when the project is completed and Energy Corporation starts to receive revenues from the sale of electricity. At page 55 he goes on to say that Hydro-Quebec will compensate any costs resulting from a delay by simply increasing its revenues.

Witnesses testifying on behalf of respondents said that the project will furnish the additional electricity which the Province will require in 1980. Both Bordeleau and Charuk speak of the damages resulting from the adoption of a different program. In referring to exhibit I-180 Bourbeau states that program 56 will cost $134,000,000 more than program 37 and gives his reasons in support of this affirmation. Charuk takes this figure and by means of actualization increases it to the sum of $178,000,000. At pages 89 and following Charuk admits that the number of dollars expended to realize either program 37 or program 56 is the same. He adds however that because the monies pertaining to each project will be spent at different times the latter becomes the more expensive program. Bourbeau at page 5 of his testimony of 3 May says that in the event of a delay Hydro-Quebec will be able to obtain electricity elsewhere at additional costs. A review of his testimony and the figures mentioned shows that such costs are remote in time and place.

Both Skinnarland and Khazzom, testifying on behalf of petitioners, contradicted the testimony of respondents' witnesses on these particular matters. Khazzom states that Hydro-Quebec's projections of the demand for electrical power of the integrated system are exagerated. According to this witness these projections are out of line with anything that could be realistically expected.

He gives detailed reasons in support of this affirmation. He also affirms that the electrical needs of the Province in 1980 will be much less than that projected by Hydro-Quebec. At page 83 of his testimony he predicts a rate of growth of between 4 and 4½% whereas Bourbeau at page 79 of his testimony of 3 May predicts a growth of between 7 to 8%. Both witnesses give reasons in support of their conflicting opinions. Skinnarland says the damages forecast in exhibit I-180 will not occur. In the course of his testimony of 18 May he explains why there in no difference in the capital cost of both projects. In speaking of exhibit P-115A table 2 witness at page 82 says that a delay in the realization of the project will not result in any additional costs.

The evidence is to say the least contradictory. The Court has received no convincing or satisfactory proof that a delay in the realization of the project will cause damages to Hydro-Quebec.

In addition I should add that this Court is not the proper authority to decide either what the energy needs of Hydro-Quebec and the Province will be in 1980, or which of the several programs mentioned in the testimony of the witnesses should be adopted by Hydro-Quebec to fulfill the energy needs of the Province in 1980.

d) a subsidiary argument

In addition to the arguments based on monetary damages, respondents argue that the area affected by the works is quite small when compared to the vastness of the region and that consequently petitioners can exercise their rights elsewhere therein. It is not the vastness of the region that is important but rather the use which petitioners are making of the particular areas where the works are being carried out. Respondents' argument in this respect cannot be retained because the proof reveals that the lands, lakes, rivers, and streams affected by the project are of extreme importance to petitioners.

e) conclusions

What this Court would have to decide, if it were considering balance of convenience, is the relative convenience and

inconvenience caused to the parties by the works. The damages referred to in this section must be balanced against the damages which petitioners will continue to suffer if the works continue. Elsewhere in this part I said that the damages to petitioners will be great. In many instances such damages will be not only devastating but irreparable. In addition I find it difficult to compare such monetary loss to the damages which such a large group of people will suffer. The right of petitioners to pursue their way of life in the lands subject to dispute far outweighs any consideration that can be given to such monetary damages.

It is my opinion that greater damage would be caused to petitioners by refusing to grant the injunction in the event that the final judgment maintains the rights of petitioners that to respondents by granting the injunction in the event that the Court in considering the final application concludes that the injunction should not issue.

For these reasons, even if I were to consider balance of convenience, I would come to the conclusion that balance of convenience militates in favour of petitioners.

PART IX

CONCLUSIONS

In view of the conclusions I come to in the present judgment, it becomes unnecessary to decide the other issues raised by petitioners.

For the reasons given in Part 1, the application of Chief Andrew T. Delisle, Chief Michael McKenzie, Chief Max Gros-Lou Inuit Community of Fort Chimo, and Northern Quebec Inuit Associatio is dismissed. However since respondents could have raised the said issues by way of a preliminary exception when the action was instituted thereby saving a great deal of time and expense, respondents are granted costs of a preliminary exception only.

The application presented by the remaining petitione is granted in part. Security is hereby fixed at the sum of $10,000 In arriving at this amount I have taken into consideration the occupation and financial status of petitioners, their clear right to obtain such an order, and finally the costs and damages which may result therefrom.

In the conclusions of their application, petitioners request this Court to impose certain limitations in so far as respondent Canadian National Railway Company, and respondent Quebec Hydro Electric Commission (Hydro-Quebec) are concerned.

The Court does hereby order respondents, their offic directors, employees, agents, servants, and those acting under thei authority and pursuant to their instructions:

a) To immediately cease, desist, and refrain from carrying out works, operations, and projects in the territory described in the schedule of Bill-50 including the building of roads, dams, dykes, bridges, and connected works;

b) To cease, desist and refrain from interfering in any way with petitioners' rights, from trespassing in the said territory and from causing damage to the environment and the natural resources of the said territory;

except, in respect to respondent Canadian National Railway Company, in so far as such works, operations and projects may be authorized by applicable valid federal Legislation; and provided that in respect to respondent Hydro-Quebec the foregoing injunction shall apply only, in respect to works, operations, and projects outside the territory, to those related to the La Grande complex; and provided also that by the foregoing injunction the respondent Hydro-Quebec shall not be prevented from producing, transmitting, and distributing in the territory contemplated by Bill-50 the energy required to meet the requests of the inhabitants of the said territory for electricity in accordance with its present practice;

the whole with costs including the costs of all exhibits and expert evidence.