

ATTACHMENT I

NON-PUBLIC DOCUMENT –

**CONTAINS TRADE SECRET OR PRIVILEGED
DATA**

ATTACHMENT II

**Regional Power Supply
Adequacy/Reliability Study
Phase I Report
Northwest Power Planning Council
December 8, 1999**

DUE TO THE LENGTH OF THE DOCUMENT, ATTACHMENT II HAS BEEN PROVIDED TO THE COMMISSION AND TO PARTIES RECEIVING THE NON-PUBLIC DOCUMENT. PARTIES RECEIVING THE PUBLIC DOCUMENT SHOULD CONTACT JOLYNN RAINS (503-658-4181 OR jolynn@research.com) IF THEY WISH TO RECEIVE A COPY OF THIS ATTACHMENT.

ATTACHMENT III

AN ASSESSMENT OF HYDRO-QUEBEC'S SECURITY OF SUPPLY IN ACCOURDANCE WITH THEIR ENERGY RELIABILITY CRITERIA

18 DECEMBER 1998

DUE TO THE LENGTH OF THE DOCUMENT, ATTACHMENT III HAS BEEN PROVIDED TO THE COMMISSION AND TO PARTIES RECEIVING THE NON-PUBLIC DOCUMENT. PARTIES RECEIVING THE PUBLIC DOCUMENT SHOULD CONTACT JOLYNN RAINS (503-658-4181 OR jolynn@research.com) IF THEY WISH TO RECEIVE A COPY OF THIS ATTACHMENT.

ATTACHMENT IV

SOCIOECONOMIC IMPACTS ASSOCIATED WITH MANITOBA HYDROELECTRIC POWER GENERATION IN THE MANITOBA BOREAL ENVIRONMENT

**SOCIOECONOMIC IMPACTS ASSOCIATED WITH MANITOBA
HYDROELECTRIC POWER GENERATION
IN THE MANITOBA BOREAL ENVIRONMENT**

“We used to make a good living out of our community...[before] the flood. When you look into the future, there is really nothing there for us, for our children [and] grandchildren”.

Testimony of an Elder before the Manitoba
Aboriginal Justice Inquiry in 1991¹

The projects forced Aboriginal communities to defend their homelands, a fight that fundamentally altered Canadian legal and political views on Aboriginal rights. . . . Manitoba Hydro got what it wanted as it proceeded with this massive project. The reaction from Aboriginal people has been far from positive. . . . Aboriginal people. . . . argue that they were never told of the environmental destruction that would occur. They say that they were never told that graves would be washed away and fish habitats demolished, not that an entire way of life for what had previously had been strong communities would disappear.

*Report of the Aboriginal Justice
Inquiry of Manitoba, 1991²*

A. Overview

The Lake Winnipeg, Churchill-Nelson River Hydro Project in northern Manitoba is one of the largest and most complicated hydroelectric projects ever undertaken in Canada.³ The Project adversely affected vast areas of environmentally fragile boreal environment, animal habitat and indigenous peoples' lands, as a result of river diversions, flooding, seasonal inversion of flows, shoreline erosion, and destruction of access.

¹ Report of the Aboriginal Justice Inquiry of Manitoba (1991) at p. 174

² [Manitoba, Queen's Printer: Report of the Aboriginal Justice Inquiry of Manitoba, Winnipeg, Manitoba, 1991 at p. 516.](#)

³ In “Toward Assessing the Effects of Lake Winnipeg Regulation and Churchill River Diversion on Resource Harvesting in Native Communities in Northern Manitoba” (Winnipeg: Department of Fisheries and Oceans, 1991), Usher and Weinstein describe the project as “one of the largest river diversion and regulation projects anywhere in the subarctic”.

The Cree peoples in Manitoba, in particular five Cree communities living on or near the affected rivers⁴, were not consulted, nor was their consent acquired, before the flooding and destruction of their lands. The environmental devastation has since caused severe ecological, socio-economic and cultural devastation to Cree traditional lands, communities and economies.

The alteration and destruction of such vast areas of boreal lake, river and forest habitat, including through the flooding and altering of vast areas of indigenous peoples' traditional lands, has inevitably resulted in extremely serious and negative socioeconomic impacts.

1. The Project and the Cree Community at Cross Lake Manitoba

The area of Cross Lake is home to approximately 5500 Pimicikamak Cree Nation citizens, about half of the entire Cree population of the affected lands.

The Churchill-Nelson River Hydro Project (the "Project") was conceived in the mid-1960s by the provincially-owned Manitoba Hydro-electric Board and was substantially completed in 1974, the year in which the Crees' traditional lands were flooded. It is a massive hydroelectric development project. It entails the diversion of two major rivers, the Churchill and Nelson Rivers, which drain almost all of the provinces of Manitoba and Saskatchewan.

The Churchill River is diverted just before it naturally would become a waterfall at Missi Falls. Instead of flowing over Missi falls, 85 percent of the water is now diverted into large reservoirs along the Nelson River upon which four generators have been constructed to harness the power of the additional flow.⁵ At Missi Falls, the flow of the Churchill River was cut from an average of 1,050 cubic metres per second to an average of 150.⁶

The Project creates a number of massive reservoirs: one where the Churchill River is dammed; and a second where the entire Lake Winnipeg, which naturally flowed into the Nelson River, is dammed to conscript it as a reservoir, channelled and regulated so that Manitoba Hydro can maximize pulsed flows to power plants downstream on the Nelson River during the winter months when demands for hydroelectricity are at a peak (and restrict the flow of the river during the summer months).⁷

⁴ The communities of Cross Lake, Split Lake, Norway House, York Landing and Nelson House. Other communities not were also severely affected, such as the community of South Indian Lake.

⁵ P.M. Larcombe (Cobb), "Northern Flood Agreement Case Study in a Treaty Area - Prepared for the Royal Commission on Aboriginal Peoples" (1995) at p.9.

⁶ Larry Krotz, "Dammed and Diverted", *Canadian Geographic* (Feb/March 1991) 36-44 at p.39

⁷ Larcombe, supra note 4 at p. 10

The Project has caused massive changes to water levels and flows. Some rivers, like the Churchill, have had their flows radically reduced. Other rivers, such as the Nelson, have radically increased flows. Cross Lake (the lake itself) has dropped by more than three metres. In addition, Cross Lake now suffers a complete seasonal reversal of flow pattern: in the summer, hundreds of square kilometres of lake bed are exposed, while in the winter, the discharges are approximately twice as great as they normally would, with ice rendered unstable and hazardous for travel.⁸

This is all a result of increased hydroelectric generation. *Canadian Geographic* describes Cross Lake itself, for example, as follows:

What used to be a lake is now little more than a muddy pond...You can see the old water line on the rocks. Now fields of willows and weeds grow in the muck. To get to the receded water, residents have built long, fingery docks, some jutting up 50 metres out from the houses like parched tongues seeking moisture.⁹

In April 1975, the Lake Winnipeg, Churchill and Nelson Rivers Study Board, an official entity appointed to assess the social and environmental impacts of the proposed Project, stated:

Failure to identify the beneficiaries of resource allocation decisions can readily result in the transfer of benefits to one particular group in our society at a cost to another. Manitoba Hydro is a public utility. It is a corporate “creature of state” which has the provision of electrical service at least cost as its prime motive. As a Crown corporation, the residents of Manitoba may be regarded as “stock holders” in Manitoba Hydro in much the same way as they may be regarded as “stock holders” in Manitoba’s natural resources. Therefore, additional costs to Manitoba Hydro to compensate for displaced resource productivity should be equated only to the value of the displaced resource. Private property damages, lifestyle disruptions and income losses resulting from displaced resources should [however] be compensated. *To do otherwise would distribute or transfer costs to a specific group of Manitobans.*¹⁰ [Emphasis added.]

These observations, given the subsequent failure over a quarter of a century by Manitoba Hydro and the governments of Manitoba and Canada to implement the recommendations of the Study Board, are, sadly prophetic.

On a pan-Canadian basis, the 1996 final report of the Canadian Royal Commission on Aboriginal Peoples stated with extraordinary clarity:

⁸ Larcombe, supra note 4 at p. 10

⁹ Krotz, supra, note 5 at p. 38.

¹⁰ Lake Winnipeg, Churchill and Nelson Rivers Study Board. *Summary Report*. April 1975 at p. 56.

Aboriginal Peoples have had great difficulty maintaining their lands and livelihoods in the face of massive encroachment. This encroachment is not ancient history. In addition to the devastating impact of settlement and development on their traditional land use areas, the actual reserve or community land base of Aboriginal people has shrunk by almost two-thirds since confederation, and on-reserve resources have largely vanished. The history of these losses includes the abject failure by ... Indian Affairs' stewardship of reserves and other aboriginal assets. As a result, *Aboriginal people have been impoverished, deprived of the tools necessary for self-sufficiency and self-reliance.*¹¹

The phenomenon being identified here is best captured in one plain English word: "dispossession". The socioeconomic impacts as described by the anthropologists, the Royal Commissions, and the Aboriginal peoples themselves, are plain to see: mass unemployment and poverty, loss of whole economies and ways of life, and the fracturing and destruction of peoples' relationships with their lands.

a. Environmental impacts

The Project has been severely destructive to the boreal forests and aquatic environment of Northern Manitoba.

As a result of the flooding and its interaction with the permafrost, the shorelines of the rivers and lakes have still not stabilized 24 years after the initial flooding. Instead, the lakes have been subjected to a continuous cycle of erosion with the water battering thousands of miles of island, river and lakeside shorelines.

The vast flooding and changes in water levels and flows have severely altered migration patterns of animals and birds. Waterfowl, for example, have been forced to new feeding and breeding grounds, great distances from their original habitats.¹² The waters themselves are murky and sediment-filled, drastically reducing water quality for animals and humans.

The inundation of large areas of vegetated lands has (through unanticipated microbial action) caused the release of methyl-mercury into the shoreline areas and lakes and up the food chain. Methyl-mercury contamination of fish in the affected areas has at times been at levels dangerous to both the fish and to humans who eat them.

b. Socio-economic and Cultural Impacts

¹¹ Royal Commission on Aboriginal Peoples: *Final Report, Vol. 2 (Ottawa: 1996)* at p. 425 ("RCAP")

¹² James. B. Waldram, "Hydroelectric Development and Dietary Delocalization in Northern Manitoba, Canada" 44(1) *Human Organization* 41-49 (1985) at p.42.

The environmental damage has drastically and negatively affected hunting, fishing and trapping and the subsistence culture of the Cree communities. Methyl-mercury contamination and the reduced quality of fish has destroyed the commercial fishing industry and has made the fish - an integral part of the Cree subsistence diet - dangerous to eat. Commercial fishing on Cross Lake has ceased since 1979.¹³

The inundation of the shorelines and the alteration of the migratory patterns of the animals have fundamentally disrupted hunting and trapping. In many cases, Cree hunters must travel great distances, at prohibitive costs, in order to find fertile hunting grounds.¹⁴

The changes to water flows and levels have also disrupted traditional Cree travel routes and have made many routes fatally treacherous. At least 13 Crees have drowned trying to continue to travel, fish or hunt on unstable reservoir ice and waters. In total, more than 50 members of the community have been killed, directly or indirectly, as a result of the mega-project. A Canadian Treaty arbitration court has found Manitoba Hydro legally liable for a number of these deaths. In addition, in 1999 alone over 140 Cree residents of Cross Lake attempted suicide, with 7 fatalities. Cross Lake also experiences extremely high levels of crime, violent injury and death, substance abuse and ill health.

In a 1987 article in the *Canadian Journal of Native Studies*, Martin Loney wrote concerning the Grand Rapids Hydro Project, an earlier hydro-electric project undertaken by Manitoba Hydro in the self-same northern Manitoba hydraulic context:

Between 1960 and 1962, the Province of Manitoba and Manitoba Hydro negotiated a settlement with three Cree Bands, compensating them for the flooding of much of their land, and relocating an entire village. In the 25 years since then, *it is clear that the development and negotiations changed an independent self-sufficient people into dependent societies unable to support themselves and suffering many social problems.*¹⁵ [Emphasis added.]

Prof. Loney could have been writing about the subsequent, much larger Manitoba Hydro Lake Winnipeg, Churchill and Nelson Rivers Hydroelectric Project.

Similarly, Prof. Ronald Niezen of Harvard University wrote in 1993 in the *Canadian Review of Sociology and Anthropology* that large-scale hydro development led to destruction of the James Bay, Quebec Crees' hunting, fishing and trapping economy, and social instability resulting therefrom was reflected in high frequencies of such problems as suicide, neglect of children, vandalism, and drug and alcohol abuse.¹⁶ The James Bay

¹³ Usher and Weinstein, *supra* note 1, at p.32.

¹⁴ Notzke, Claudia, *Aboriginal Peoples and Natural Resources in Canada* (Captus University Publications, 1994) at p.18.

¹⁵ M. Loney: "The Construction of Dependency: "The Case of the Grand Rapids Hydro Project" *Canadian Journal of Native Studies VII, 1 (1987) 57 - 78* at p. 57.

¹⁶ R. Niezen: "Power and Dignity: The Social Consequences of Hydro-Electric Development for the James Bay Cree" *Canadian Review of Sociology and Anthropology*

Crees themselves have declared that the hydroelectric projects built by Hydro-Québec in their lands have resulted in destruction of their economies, culture and way of life.¹⁷

The Canadian Royal Commission on Aboriginal Peoples reported in 1996 that

[t]he Churchill River Diversion has subsequently become well known for its massive scale and detrimental effects on the northern Manitoba environment and the Aboriginal peoples who live there. Although the project directly affected the lands and livelihood of five treaty communities... and one non-treaty community, *they were not consulted, nor did they give approval for the undertaking...* Reserve and community lands were either flooded or affected by dramatic changes to levels in surrounding lakes and rivers, and *traditional land-use areas were damaged or rendered inaccessible..*¹⁸ [Emphasis added.]

In sum, the Cree economy, subsistence culture and traditional way of life have been all but destroyed by the hydroelectric Project.

c. Psychological and Spiritual Impacts

The destruction of Pimicikamak Cree and other Cree Nations' traditional way of life in Northern Manitoba has caused a state of crisis and despair in the Cree communities. There are few or no cultural or economic prospects for youth, and youth suicide is endemic. People face greatly elevated indicators of severe social stress, including substance addiction, overcrowding, disease and violence. As a result of the deprived conditions in communities, many Crees are forced to drift south to Winnipeg and other urban centres, where many end up living on the streets or in prison.

d. Violation of Fundamental Human Rights

The Project constitutes a breach of Pimicikamak Cree Nation's indigenous, Treaty, domestic constitutional and international human rights.

Perhaps most importantly, it has devastated the traditional lands and resources of the Cree Nation, and has deprived the Cree peoples of their own means of subsistence. In particular it is a continuing breach of Article 1, paragraph 2 (self-determination and deprivation of own means of subsistence) and article 27 (culture) of the International Covenant on Civil and Political Rights, and of Article 1, paragraph 2 of the International Covenant on Economic, Social and Cultural Rights (self-determination and deprivation of own means of subsistence).

XXX, 4 510 - 529; see also Grand Council of the Crees: *Submission to the International Water Tribunal, Amsterdam* (Amsterdam: International Books, 1994) at p. 168 ff.

¹⁷ See, for example, R.M. Bone, "James Bay Project" *Microsoft Encarta Encyclopedia, 1998 ed.*

¹⁸ Royal Commission on Aboriginal Peoples: *Final Report, Vol. 2* (Ottawa: 1996) at p. 516.

Many hunters have been deprived of their lives trying to continue to put food on the table for their families and community, in breach of their right to life. Cree relationships with their traditional lands and waters have been all but destroyed in breach of fundamental human rights, including the right to culture, religion, mobility, expression, security of the person and livelihood. Cree people suffer poverty, deprivation and mass unemployment, thus also breaching the particular human rights of Cree women and children at international law.

In December 1998, the United Nations Committee on Economic, Social and Cultural Rights assessed Canada's compliance with the International Covenant on Economic, Social and Cultural Rights. In finding Canada in violation of its international human rights obligations with respect to its treatment of indigenous peoples in Canada, the Committee declared:

The committee views with concern the direct connection between Aboriginal economic marginalization and the ongoing dispossession of Aboriginal people from their lands.... and endorses... that policies which violate Aboriginal treaty obligations and extinguishment, conversion or giving up of Aboriginal rights should on no account be pursued by the State Party.¹⁹

In April 1999, the United Nations Human Rights Committee assessed Canada's compliance with the International Covenant on Civil and Political Rights. In further finding Canada in violation of its international human rights obligations with respect to its treatment of indigenous peoples in Canada, -- most particularly the fundamental human right of self-determination enshrined in Article 1 of the International Covenant on Civil and Political Rights -- the U.N. Human Rights Committee declared:

The Committee notes that, as the State Party [Canada] acknowledged, the situation of the Aboriginal peoples remains "the most pressing human rights issue facing Canadians." In this connection, the Committee is most concerned that... without a greater share of lands and resources institutions of aboriginal self-government will fail, [and] the Committee emphasizes that the rights of self-determination requires, *inter alia*, that all peoples must be able to freely dispose of their natural wealth and resources and that they may not be deprived of their own means of subsistence (art. 1 , para. 2).²⁰

¹⁹ United Nations, Committee on Economic, Social and Cultural Rights: "Consideration of Reports Submitted by States Parties under Articles 16 and 17 of the Covenant[:] Concluding Observations of the Committee on Economic, Social and Cultural Rights [regarding Canada]", 4 December 1998, U.N. Doc. E/C. 12/1/Add.31.

²⁰ United Nations, Human Rights Committee: "Consideration of Reports Submitted by States Parties under Article 40 of the [International] Covenant [on Civil and Political Rights][:] Concluding Observations of the Human Rights Committee [regarding Canada]", 7 April 1999, U.N. Doc. CCPR/C/C/79/Add.105.

The situation of the Cree peoples affected by the Project, as exemplified by Pimicikamak Cree Nation at Cross Lake, are among the most egregious of the violations of fundamental human rights identified by the two U.N. committees in their examination of Canada's international human rights record.

This is all we need to say.