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NELPI Energy Law Essay: The Legal Framework for Hydro-Quebec Imports

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THE NELPI ENERGY LAW ESSAY

THE LEGAL FRAMEWORK FOR HYDRO-QUEBEC IMPORTS*

Pamela Prodan†

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I. INTRODUCTION

Hydro-Québec is a Canadian province-owned electric utility with considerable hydroelectric generation resources. In 1987, Central Maine Power Company (CMP or Company) proposed a major power purchase of up to 900 MW from Hydro-Québec. CMP represented that the power purchase was to be drawn from Hydro-Québec's entire system of power resources, and was not to be tied to the development of any particular future facility in Canada. Hydro-Québec and the Maine utility promoted Hydro-Québec power as environmentally clean, cheap and reliable. However, to meet future electric demand in the United States, Hydro-Québec plans to harness all the flowages of the James Bay rivers in the unique fragile wilderness region of northern Québec, to produce hydroelectricity. Moreover, the James Bay region is inhabited by Cree and Inuit people whose cultures are inextricably tied to the rivers and land slated for permanent destruction by hydro development. Phase one of the James Bay project had destructive impact and no environmental review. Therefore, the affected native people, particularly the Cree, are vehemently opposed to future development.¹

Canadian hydroelectric power is viewed in the United States as an environmentally clean resource, because water, the source of the power, is considered clean, and because the generating facilities are in Canada. In reality, large-scale hydroelectric generation has devastating ecological consequences. Further, the environmental effects of electric power generation are of no different magnitude or seriousness because the site of the generation is north of the border. Yet, projects that would not be considered in the United States are proposed to be constructed over the next decade across northern Canada.²

1. The Cree of Québec have employed both public pressure and litigation to oppose further James Bay developments. In the litigation arena, the Cree have intervened in United States proceedings and in Canadian National Energy Board proceedings and have brought a number of legal actions in the Canadian courts. For a short narrative of the implications of the James Bay hydropower projects, see Harry Thurston, *Power in a Land of Remembrance*, AUDUBON, at 52 (Nov.-Dec. 1991); Sam Howe Verhovek, *Power Struggle*, N.Y. TIMES, Jan. 12, 1992, (Magazine) at 16; *infra* part III. For an extensive look at the people and their resistance to the projects, see BOYCE RICHARDSON, *STRANGERS DEVOUR THE LAND* (1991).

2. *Discrimination Against Indigenous Peoples Transnational Investments and Operations on the Lands of Indigenous Peoples*, U.N. ESCOR, Commission on Human Rights, 43d Sess., Agenda Item 15, at 14, U.N. Doc. E/CN.4/Sub.2/1991/49 (1991) [hereinafter REPORT ON TRANSNATIONAL INVESTMENTS AND OPERATIONS]. To illustrate the magnitude of the problem, the planned projects at James Bay alone require three times as much total storage, and inundate more than five times as much land as the 50-year-old Bonneville Power system on the Columbia River in the United States, which includes Grand Coulee Dam. Hydro-Québec also wants to build a hydroelectric megaproject with Newfoundland, Canada's poorest province, on Labrador's Churchill River. Fred Langan, *Canadians Negotiate Power Project*, CHRISTIAN SCIENCE MONITOR, Sept. 18, 1991, at 7. In the late

In 1989, the Maine Public Utilities Commission (PUC or Commission) turned down CMP's proposed Hydro-Québec purchase.³ However the PUC did not acknowledge that the importation of Hydro-Québec power would necessitate critical developments having environmental and social impacts in Canada. Further, the PUC expressly left the door open for a future Hydro-Québec purchase. Meanwhile, Hydro-Québec continues to market power in the United States. The two Commissioners comprising the majority that rejected the Hydro-Québec purchase have left the Commission. Legally, nothing precludes CMP from returning to the Commission with a new Hydro-Québec proposal. CMP currently receives power from Hydro-Québec through the New England Power Pool (NEPOOL), a regional operating entity composed of public and investor-owned utilities.

This paper examines the legal framework for importing Hydro-Québec power to Maine. Current state, national and international laws and policies are examined as they affect the James Bay hydroelectric projects. This article views the laws and policies in light of growing concern for the environment, and in light of the need to take responsibility for environmental destruction and for the policies causing it. Unfortunately, the current framework for dealing with environment and development is inadequate. The United States and Canadian legal systems are structured so as to promote wasteful and environmentally destructive energy development. Indeed, these energy policies threaten the existence of a healthy global ecosystem if they are not challenged and changed.

II. THE GLOBAL ENVIRONMENT

Earth Summit, the United Nations Conference on the Environment and Development took place in Rio De Janeiro, Brazil, in June 1992.⁴

1960s, Hydro-Québec built a 5,428 MW project at Churchill Falls in Labrador, at a time when oil was about \$1 per barrel, in a deal that turns out less than favorable to Newfoundland: Hydro-Québec bought all of the power from Newfoundland at 2.2 cents per kilowatt hour (kwh) for electricity until 2020, thereafter 1.6 cents per kwh until 2040. *Id.* The two proposed Labrador dams would produce 3,088 MW of electricity, compared to the proposed James Bay Great Whale's 3,060 MW. *Id.* The Innu people in the affected, yet unceded, territory have protested the existing and proposed hydroelectric projects by refusing to pay electric bills and by removing electric power meters from residences. Peter Penashue, President of Innu Nation, Address at St. John's, Newfoundland (Nov. 5, 1992). See *infra* notes 21-24 and accompanying text for description of other projects.

3. Re Central Maine Power Co., No. 88-111, slip op. (Me. P.U.C. Jan. 9, 1989); Re Central Maine Power Co., Nos. 88-111 and 87-261, slip op. (Me. P.U.C. Jan. 23, 1989) [hereinafter *Order*]. The Commission on January 9 issued an abbreviated Statement of Commission Decision in the Hydro-Québec proceeding, Docket No. 88-111, and two weeks later issued its full opinion. Commissioners David Moskovitz and Cheryl Harrington constituted the majority.

4. Earth Summit took place twenty years after the Stockholm Conference on the Environment

The gathering was the culmination of much attention and research directed by the United Nations toward the environment in recent years, beginning with the convening of the World Commission on Environment and Development (WCED) in 1983.⁵ Earth Summit and its aftermath could determine whether the nations of the world will cooperate and seriously address the global crisis.⁶

The United Nations General Assembly established the WCED with a mandate to 1) make recommendations for dealing with critical and interlocking environment and development issues, 2) propose international mechanisms for needed change, and 3) promote understanding and commitment to action.⁷ Taking an uncommon approach, the WCED not only commissioned expert papers, convened high-level panels, and heard from distinguished world figures, but it also took evidence from thousands of people, from all walks of life.⁸

According to the WCED, during this century the relationship between humanity and the natural world sustaining it has undergone a profound change. With the twenty-first century approaching, human beings have acquired the power to alter the earth's natural systems in major and unintended ways.⁹ These changes are occurring so rapidly that our scientific disciplines are unable to assess the impacts; and our political and economic institutions, which evolved in a more fragmented world, have been unable to adequately adapt and respond.¹⁰

The main concept of the WCED's report relating to government

launched the world-wide movement. For information on the Stockholm Conference, see LYNTON KEITH CALDWELL, *INTERNATIONAL ENVIRONMENTAL POLICY* 20 (1990).

5. *Id.* at 93.

6. *Id.*

7. WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, *OUR COMMON FUTURE* 5 (1987). The WCED and its report are also known as The Brundtland Commission and The Brundtland Report, respectively, after Dr. Gro Harlem Brundtland, then Prime Minister of Norway, who chaired the WCED.

8. James MacNeill, *Where Do We Go From Here?*, in *TRIBUTE TO OUR COMMON FUTURE* 64 (Jane Stuart, ed. 1988). In short, the WCED's conclusions about the global crisis are 1) no single organization or government can, alone, solve the problems confronting us all, and 2) the problems are interconnected and so are the solutions. *Id.* The WCED has provided numerous insights into the problems leading up to and perpetuating global poverty and environmental degradation, and how they interconnect. Effects of human activities are no longer neatly compartmentalized within nations, sectors (energy, agriculture, trade), and broad areas of concern (environmental, economic, social). WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, *OUR COMMON FUTURE* (1987) reprinted in *WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, FROM ONE EARTH TO ONE WORLD: AN OVERVIEW BY THE WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT*, at 11 (1987) (paper published by Oxford University Press) [hereinafter *OVERVIEW*]. The various global crises that have seized public attention are not *separate* crises, but rather, all one. *Id.*

9. *OVERVIEW*, *supra* note 8, at 23.

10. *Id.*

conduct is “sustainable development”. Sustainable development is economically and ecologically sustainable development. It meets present needs, without compromising future generations’ ability to meet their needs.¹¹ “Sustainable global development requires that those who are more affluent adopt lifestyles within the planet’s ecological means — in their use of energy, for example.”¹² According to the WCED, existing laws are inadequate to protect future generations from the impacts of present development.¹³ Nevertheless, we can acknowledge the limitations of present technology and introduce a new era of sustainable development.¹⁴

One of the six priorities outlined in the Commission’s full report¹⁵ is to provide the legal means for creating sustainable development. National and international laws are rapidly being outdistanced by the accelerating pace and expanding scale of impacts of development on the environment.¹⁶ In particular, the Commission asserts that “[g]overnments now need to fill major gaps in existing national and international law related to the environment [and] to find ways to recognize and protect the rights of present and future generations to an environment adequate for their health and well-being. . . .”¹⁷ Public participation is essential to meeting the challenge.¹⁸

Energy is an especially important issue because it profoundly affects

11. *Id.* at 14.

12. *Id.*

13. *Id.* at 22.

14. *Id.* at 14.

15. *Id.* at 22.

16. *Id.*

17. *Id.* It is not simply a matter of changing laws, however. Institutions must change as well.

The objective of sustainable development and the integrated nature of the global environment/development challenges pose problems for institutions, national and international, that were established on the basis of narrow preoccupations and compartmentalized concerns. Governments’ general response to the speed and scale of global changes has been a reluctance to recognize sufficiently the need to change themselves. The challenges are both interdependent and integrated, requiring comprehensive approaches and popular participation.

Yet most of the institutions facing those challenges tend to be independent, fragmented, working to relatively narrow mandates with closed decision processes. Those responsible for managing natural resources and protecting the environment are institutionally separated from those responsible for managing the economy. . . .

. . . .
The other great institutional flaw in coping with environment/development challenges is governments’ failure to make the bodies whose policy actions degrade the environment responsible for ensuring that their policies prevent the degradation. . . .

The existence of such agencies gave many governments and their citizens the false impression that these bodies were by themselves able to protect and enhance the environmental resource base.

Id. at 15.

18. *Id.*

the environment and people, perhaps more than most realize. Energy production and use have environmental impacts greater than any other development in the history of civilization. Yet, with world energy supplies and markets in flux, and with new documentation of environmental changes, the issues surrounding large scale energy developments have become increasingly complex and volatile. Daily we receive new information about the world energy situation, influencing our opinions about the desirability of particular energy sources. As our knowledge grows, there is an increasing urgency to heed the warnings of the WCED, and work toward changing our institutions and laws to adequately address the global crisis.

The solution must be comprehensive. "The ability to anticipate and prevent environmental damage requires that the ecological dimensions of policy be considered" contemporaneously with other dimensions such as trade, energy, and economy.¹⁹ "The real world of interlocked economic and ecological systems will not change; the policies and institutions concerned must."²⁰

III. HYDROELECTRIC DEVELOPMENT AT JAMES BAY

The full and cumulative impacts of large scale hydroelectric development at James Bay have never been studied, but it is safe to assume that the impacts go far beyond what anyone imagined when the projects were first conceived.²¹ Presently, hydro development projects are proposed not only for the James Bay watershed, but for the entire Hudson's Bay watershed, involving rivers in the provinces of Ontario and Manitoba as well as Québec.²² To date no adequate studies have been done of

19. *Id.*

20. *Id.* The WCED and its conclusions exemplify the changing attitudes about development around the world. Popular science writers now write matter-of-factly that everything on earth is interconnected in complex ways into a single, finite global biosphere, without regard for national borders, and that the tremendous impacts of large scale developments must be examined in the context of entire ecosystems. David Suzuki, *Environment Has Global Impact*, THE GAZETTE (Montreal), Oct. 5, 1991, at J6.

21. For example, Canadian scientists researching the relationship between flooding for hydroelectric dams and global warming now believe that hydroelectric stations could contribute as much to global warming as coal-fired power stations. Graeme Hamilton, *Gagged Scientist's Study May Show Hydro Power as Polluting as Coal*, THE GAZETTE (Montreal), Oct. 11, 1991, at A8. The scientist, who was prevented by his superiors at the Fisheries and Oceans Department from testifying at a New York City hearing on the New York-Hydro-Québec contract, says his research so far has indicated that submerged vegetation will decay after flooding and release huge amounts of carbon dioxide and methane gas. *Id.* His research has been supported by colleagues. Terrence Wills, *Scientist Studying Great Whale Gives Ottawa a Damage Report*, THE GAZETTE (Montreal), Nov. 28, 1991, at D18.

22. Winona LaDuke, Address at Burlington, Vt. (Mar. 22, 1991); Graeme Hamilton, *Damming*

the cumulative impacts of such development on the affected river ecosystems. In addition to ambitious plans for hydroelectric development, Québec's Premier Robert Bourassa has advanced a plan for water diversion to western Canada and the United States that would transform all or part of the marine basin of James Bay into a vast freshwater reservoir.²³ Consequently, the cumulative impacts of development projects threaten to devastate the entire Hudson's Bay ecosystem, the continent's largest estuarine system.²⁴

As well as increasing the province's export capability, Hydro-Québec's current hydroelectric expansion plans allow the utility to offer low-cost power as an incentive for aluminum and magnesium smelters to relocate to Québec or expand their existing operations in Québec.²⁵ Such expansion will invariably lead to increased water and air pollution in the region, and will contribute to the greenhouse effect.²⁶

Already, during the first stage of the James Bay project, completed in 1986, Hydro-Québec has diverted three rivers into the La Grande River, inundating 3,675 sq. km of forest and tundra.²⁷ The diverted rivers lost up to 90% of their natural flows, while the flow of the La Grande River doubled.²⁸ Since the dams are operated in response to demand for electrical power in the south, and demand is greatest in the winter, Hydro-Québec stores water in the summer, reversing the natural seasonal cycle of flow levels.²⁹ The river alterations interfere with migration and spawning of freshwater fish, and desiccate the estuarine wetlands used by

the Northern Rivers; Three Provinces Are Looking for Power in the James Bay Area, THE GAZETTE, (Montreal) Oct. 5, 1991, at B4.

23. ROBERT BOURASSA, POWER FROM THE NORTH 133 (1985).

24. JOYCE ROSENTHAL & JAN BEYEA, LONG-TERM THREATS TO CANADA'S JAMES BAY FROM HUMAN DEVELOPMENT 15 (1989) (National Audubon Society Environmental Policy Analysis Department Report #29) [hereinafter ROSENTHAL & BEYEA]. The Hudson's Bay watershed covers one third of Canada. *Damming the Northern Rivers, Three Provinces are looking for Power in the James Bay area*, THE GAZETTE (Montreal), Oct. 5, 1991, at B4.

25. REPORT ON TRANSNATIONAL INVESTMENTS AND OPERATIONS, *supra* note 2, at 23. Environmental groups obtained the names of a number of transnational corporations that reportedly made secret agreements with Hydro-Québec for James Bay power at prices below actual cost, but a Québec court blocked publication of the names of the transnationals with which Hydro-Québec negotiated power contracts. Rhéal Séguin & André Picard, *Hydro-Québec selling cut-rate power to firms*, MNA says, GLOBE & MAIL (Toronto), Apr. 17, 1991, at A1.

26. New research shows that two obscure gases released during aluminum production, tetrafluoromethane and hexafluoromethane, have a global warming impact more than 8,000 times that of carbon dioxide. Graeme Hamilton, *Québec's Smelters Spew Two Gases That Cause Greenhouse Effect: Study*, THE GAZETTE (Montreal), Jan. 25, 1992, at A5. The estimated warming effect of gases released in aluminum smelting equals that of about 10% of Canada's total carbon dioxide emissions. *Id.*

27. REPORT ON TRANSNATIONAL INVESTMENTS AND OPERATIONS, *supra* note 2, at 23.

28. *Id.*

29. ROSENTHAL & BEYEA, *supra* note 24, at 13-17.

migrating waterfowl for feeding.³⁰

Aside from the potentially devastating environmental impacts of huge hydroelectric projects such as those proposed across northern Canada, there is another troubling aspect to these developments: the particularly great consequences for indigenous people.³¹ The impacts of the first phase of hydroelectric development on the cultures of the people indigenous to the James Bay region have been significant. The LaGrande hydro-electric complex is one of the world's largest of its kind, revealing its dams, dikes, service roads and construction scars in Landsat satellite photos.³² Cree family trap lines have been flooded,³³ and access roads built for construction crews are now used by loggers and recreational hunters, further undermining the Cree food system and culture.³⁴ Moreover, the decay of organic matter in the reservoirs has caused the release of mercury into the food chain, resulting by 1984 in mercury levels in two thirds of the Cree population in excess of levels considered safe by the World Health Organization.³⁵

Such effects were not entirely unexpected. In 1974, when the Cree sought to obtain a court injunction to stop the first stage of the projects, a Québec Superior Court predicted the impacts of the James Bay Project would be devastating to the indigenous people and would result in the destruction of the ecosystem.³⁶ The trial court granted the injunction,

30. *Id.*

31. The reality that the people most adversely affected by the James Bay megaprojects are indigenous peoples cannot be overlooked. Large-scale projects that change traditional land-use patterns can have more far-reaching impacts on indigenous peoples than on non-indigenous peoples because land plays such an important role in indigenous peoples' survival. REPORT ON TRANSNATIONAL INVESTMENTS AND OPERATIONS, *supra* note 2, at 7. For instance, the indigenous peoples of northern Canada still depend on wildlife and fisheries for a large proportion of their diet. Indeed, not only their traditional subsistence activities, but their social structure and culture are largely dependent on the land. The loss of the land means the loss of their traditions. In contrast, non-indigenous peoples can and do relocate without losing their very cultural identity. Moreover, unlike indigenous peoples, non-indigenous peoples seldom have use rights that have existed for thousands of years. *Id.* In recent history, some of the most dramatic disruptions of indigenous societies have been associated with hydroelectric development. *Id.* at 13. Dams built or planned worldwide since 1970 will displace an estimated two million people. *Id.* at 14. Activities with significant risks are more likely to be sited on the lands of indigenous people, and as a practical matter, are less likely to be supervised adequately, because of the remoteness of the areas. It is a small number of specialized transnational corporations such as the Bechtel Corporation that have been the major beneficiaries of the widespread development of hydroelectric power in developing countries on the land of indigenous peoples. *Id.* at 13. The regularity and frequency of the siting of such physically destructive projects on traditional lands of indigenous peoples has been attributed to environmental racism. See Thurston, *supra* note 1, at 58.

32. CHARLES SHEFFIELD, MAN ON EARTH HOW CIVILIZATION AND TECHNOLOGY CHANGED THE FACE OF THE WORLD - A SURVEY FROM SPACE 38 (1983).

33. Grand Chief Matthew Coon-Come, Address, August, Me. (Apr. 20, 1989).

34. REPORT ON TRANSNATIONAL INVESTMENTS AND OPERATIONS, *supra* note 2, at 23.

35. *Id.*

36. See *Kanatewat v. James Bay Dev. Corp.* (1973), [1974] Que.P.R. 38 (Que. Sup. Ct.), *rev'd*,

but within a week the Québec Court of Appeals dissolved it. In a severe blow to native rights and the environment, the Canadian Supreme Court affirmed.³⁷

IV. JAMES BAY TREATY

The traditional policy of Europeans toward Native people has been summarized as follows:

From the earliest days of European settlement in North America, the relationship between Indians and non-Indians was characterized by an assumption on the part of colonial governments that native people had an interest in the land which had to be dealt with before non-native settlement or development could take place.³⁸

More recently, the Canadian Supreme Court has stated, "the nature of the Indians' interest is therefore best characterized by its general inalienability, coupled with the fact that the Crown is under an obligation to deal with the land on the Indians' behalf when the interest is surrendered."³⁹

In spite of this traditional respect for the sovereignty of native lands, the Québec government unilaterally announced its proposals for the

(1975), [1975] C.A. 166, *leave to appeal refused* (1973), 41 D.L.R. (3d) 1 (S.C.C.). The opinion states:

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 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 Fen-ton, the whole system which took 8,000 years to develop will be destroyed.

.....
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.

For further description of the actual social and environmental impacts nearly 20 years later, see Thurston, *supra* note 1. For a more detailed description of the likely cumulative environmental impacts of James Bay development, see ROSENTHAL & BEYEA, *supra* note 24, at 13-20.

37. See *Kanatewat v. James Bay Dev. Corp.*, (1975), [1975] C.A. 166, *rev'g* (1973), [1974] Q.P.R. 38 (Que. Sup. Ct.), *leave to appeal refused* (1973), 41 D.L.R. (3d) 1 (S.C.C.). See also *infra* notes 43-46 and accompanying text.

38. CANADIAN OFFICE OF NATIVE CLAIMS, *NATIVE CLAIMS: POLICY, PROCESSES, AND PERSPECTIVES 2* (1978) (emphasis added).

39. *Guérin v. R.* (1984), 13 D.L.R. (4th) 321, 339. Of course, this statement begs the question as to what obligation the Crown is under, if any, before the interest is surrendered.

James Bay region in April 1971.⁴⁰ The Cree people had never ceded their ancestral lands,⁴¹ yet the province did not consult with the Cree first to tell them it planned to dam the rivers, flood their traplines and their ancestral graves.⁴² This unilateral invasion on the part of the province, prior to negotiating any treaty under which the Cree might surrender certain rights to their land was a violation of Cree sovereignty and self-determination.

The Cree attempted to stop Hydro-Québec. After six months of testimony by environmentalists, trappers and engineers, the Cree were able to obtain a court injunction to stop Hydro-Québec construction in November of 1973.⁴³ The Superior Court found that the project was clearly inconsistent with the existence of the aboriginal title of the indigenous population and issued an interim injunction to restrain the construction.⁴⁴ However, the Québec Court of Appeals overturned the injunction a week later. The court concluded that the aboriginal title of the Cree and Inuit of James Bay was extinguished by the Hudson Bay Company Charter of 1670, and, due to the Middle East oil embargo, that the balance of convenience ran against the native people.⁴⁵ In other words, the law allows inconveniences in the lifestyle of a small segment of the population if there are advantages for the population as a whole.⁴⁶

Due to their failure to halt the project in the court system, the Cree, in their present chief's words, "decided to seek a negotiated settlement in the face of this crass show of power" by the provincial government against the native people.⁴⁷ The resulting settlement became known as

40. CANADIAN OFFICE OF NATIVE CLAIMS, *supra* note 38, at 8.

41. *Id.* at 7. The Québec Boundaries Extension Act of 1912 transferred the area north of the Eastmain River from the Northwest Territories to the jurisdiction of Québec, but with the provision that Québec recognize the native people's rights in the territory and obtain surrenders of such rights in the same manner as the Canadian government had. *Id.*

42. Grand Chief Matthew Coon Come, Address Before the International Bar Association, Strasbourg, France (Oct. 4, 1989).

43. *Kanatewat v. James Bay Dev. Corp.* (1973), [1974] Q.P.R. 38 (Que. Sup. Ct.), *rev'd*, (1975), [1975] C.A. 166, *leave to appeal refused* (1973), 41 D.L.R. (3d) 1 (S.C.C.). Judge Malouf rejected Québec's argument that the territory was given to the Hudson Bay Company, citing a case affirmed by the Supreme Court of Canada in which the judge stated that "[t]hat 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." *R. v. Sikyea* (1964), 43 D.L.R. (2d) 150, 152 (S.C.C.).

44. *Kanatewat* (1973), [1974] Q.P.R. 38 (Que. Sup. Ct.).

45. *Kanatewat* (1975), [1975] C.A. 166, 185 ("The preponderance of the evidence submitted on the petition for an interlocutory injunction was to the effect that the inconvenience to Appellants resulting from the stoppage of the work on the project would be far greater than the inconvenience to Respondents in the event that work on the project is allowed to continue.").

46. *Id.*

47. Grand Chief Matthew Coon Come, *supra* note 42.

the James Bay and Northern Québec Agreement and was effected by parallel federal and provincial legislation six years after Québec initiated the projects.⁴⁸ It gave the Cree control of education, health and social services, rights with respect to the land, a system of justice and police protection, a voice in the approval of new projects in the territory, and guarantees of major and important participation in the development of sub-Arctic Québec.⁴⁹

Under the Agreement, the Cree received compensation, but they did not sell their land.⁵⁰ Instead, the Agreement acknowledged the Cree and Inuit people's traditional use and occupancy of the land and translated these traditional rights into well-defined cultural, social, and economic rights and benefits including environmental protection guarantees.⁵¹ This provided the native people of Northern Québec with a substantial degree of control over their future political, economic, and social evolution.⁵²

48. CANADIAN OFFICE OF NATIVE CLAIMS, *supra* note 38, at 8. The signatories to the Agreement are the federal government of Canada, the Québec provincial government, the Grand Council of the Cree (of Québec), the Northern Québec Inuit Association, the Société d'Énergie de la Baie James, and Hydro-Québec.

49. Grand Chief Matthew Coon Come, *supra* note 42. The Cree, under the James Bay Agreement, have structures of government consisting of 1) eight Cree Community Councils providing municipal management of the Cree villages and 1,274 square miles of Category 1A land, containing the villages, set aside essentially as reserves; 2) eight Cree Community Corporations which have as their purpose surface ownership and management of 884 square miles of Category 1B lands, which are entirely under provincial administration and can be expropriated by Québec; 3) the Cree Regional Authority, a corporation under Québec law that includes all Cree of James Bay and their Community Corporations; 4) five joint entities in which the Cree share the administration of environmental, wildlife and economic matters with the various levels of government; 5) other Cree-only bodies that govern health, education and social services, administer proceeds of the settlement, or develop trapping, tourism and handicrafts. CANADIAN OFFICE OF NATIVE CLAIMS, *supra* note 38, at 16. The powers of the community corporations cover environment, social welfare and natural resources on Category 1B lands, while the powers of the community councils cover residence, licensing, surface resources, taxation, land use, public works, environment, social, sub-division, and non-seizure. *Id.*

50. Grand Chief Matthew Coon, *supra* note 42.

51. CANADIAN OFFICE OF NATIVE CLAIMS, *supra* note 38, at 8.

52. *Contra* RICHARD H. BARTLETT, ABORIGINAL WATER RIGHTS IN CANADA 221-22 (Canadian Institute of Resources Law 1988):

. . . The Cree and Inuit do not have control of major hydroelectric development because the principal areas where such might be undertaken are excluded from Category I lands and were identified as areas subject to future development by the Société d'énergie de la Baie James. The Agreement secured only participation in the consideration of the environmental consequences of developments, albeit only advisory in nature and confined to the "ecological impact" with respect to designated hydro developments. . . . The Cree and Inuit were denied an administrative role [in the management] of water resources outside the confines of Category I lands.

It is not clear that the Treaty abrogated other rights. For example, traditionally, an Indian band on a reserve can bring action to restrain pollution, if the pollution precludes hunting, trapping, fishing, cultivation, and domestic uses. *Id.* at 69. The Cree may also have rights against pollution implied in the treaty or coming out of their rights under international human rights law.

The James Bay and Northern Québec Agreement is a "modern" treaty that provides for the settlement of aboriginal title, and contains promises with respect to the land and resources.⁵³ The Agreement sets aside areas as reserves, and a regime provides for the participation of the native people in future hydroelectric development.⁵⁴ The Cree people maintain that the Agreement gives them a veto over future development in the territory.⁵⁵ Native rights are described in the Agreement. However the terms of the Agreement are more directed to the rights and powers of the province and the Société d'Énergie de la Baie James with respect to the water resources, than to the rights of the Cree and Inuit.⁵⁶ Despite the protections afforded by the Agreement, economic and political pressures create a political climate favorable to hydroelectric development. Thus, the protections offered by the Agreement have been difficult to enforce.⁵⁷

The Cree maintain that Québec has been negligent in implementing Section 22 of the James Bay Agreement, the regime for environmental protection, by failing to provide the necessary resources to properly review the environmental impacts of the projects.⁵⁸ In the early 1970s, Québec passed legislation to avoid environmental review of the La

53. See generally, *id.* at 219-222.

54. *Id.* at 16.

55. Augusta Dwyer, *The Trouble at Great Whale*, EQUINOX, Jan./Feb., 1993 at 33.

56. BARTLETT, *supra* note 52, at 220-21.

57. The Cree have brought a number of lawsuits to compel the Canadian and Québec government to comply with the Agreement. See, e.g., Cree Regional Auth. v. Canada, [1991] 2F.C. 422, *aff'd* [1991] 3 F.C. 533. These actions are still in various stages of appeal and so it would be premature to draw any conclusions. However, if the lower court decisions hold, the federal government will be required to abide by the treaty as law, and conform to the procedures created by the agreement for a full environmental review of proposed developments at Great Whale. See Kevin Dougherty, *Crees Gain 'upper hand' in Hydro-Québec Battle*, FIN. POST, Sept. 16, 1991, § 1, at 3.

58. Grand Chief Matthew Coon Come, *supra* note 42. The Federal government has been equally lax. Sections 22 and 23 of the James Bay and Northern Québec Agreement and the Northern Québec Native Claims Settlement Act require that the Federal Administrator conduct environmental and social impact assessment and review procedures. When the James Bay Corporation called for bids for the clearing for an access road and construction of the Great Whale project, and the Federal Administrator told the Cree that he had no mandate to apply the federal impact assessment review procedure under the Agreement, the Cree petitioned for and were granted an order of mandamus against him, ordering him as Federal Administrator to comply with Sections 22 and 23 in regard to the proposed Great Whale project. Cree Regional Auth. v. Canada, [1991] 2F.C. 422, *aff'd* [1991] 3F.C. 533. The court held that Parliament intended the Agreement to operate as a substantive enactment, as if the Agreement had become part of the federal statutes, and found jurisdiction for considering a grant of mandamus or an injunction. In Justice Rouleau's words, "this agreement was signed in good faith for the protection of the Cree and Inuit peoples, not to deprive them of their rights and territories without due consideration." *Id.* at 432. Justice Rouleau said he was directed by the words of Chief Justice Dickson in *R. v. Sparrow* (1990), 1 S.C.R. 1075, in which courts are directed that "the sovereign's intention must be clear and plain if it is to extinguish aboriginal rights." Cree Regional Auth. v. Canada, *supra*, at 432.

Grande project and weakened the environmental review process for future hydroelectric projects.⁵⁹ Because of the failure of the government to review the effects, the Cree themselves have provided most of the environmental critique of the projects at their own expense.⁶⁰

Although a Canadian court of appeals ruling provides for a full review of future James Bay hydroelectric projects under the review process provided by the James Bay Agreement, Ottawa still maintains that the Agreement does not apply to the review.⁶¹ Instead, the federal government would rather apply the Federal Environmental Assessment Review Process (EARP) which the government maintains does not give it the authority to stop the projects.⁶²

The underhandedness of Québec's approach in proceeding with the early James Bay projects without first negotiating with the Cree and Inuit calls into question the adequacy of the ensuing Agreement. At the very least, because of the one-sidedness of the negotiations leading to the Agreement, it should not operate to deprive the Cree people of their right to control their own destiny.⁶³ The Cree would like to see alternatives to new hydro megaprojects explored first, such as cogeneration, conservation and small hydroelectric dams. These suggestions make eminently more sense from the standpoint of sustainable development than the large-scale hydroelectric proposals now planned by Hydro-Québec. Yet there appears to be no mechanism in the Agreement, nor in Canadian or Québec law, to ensure that such alternatives be explored.

59. Grand Chief Matthew Coon Come, *supra* note 42. See *infra* notes 164-172 and accompanying text.

60. *Id.*

61. See Cree Regional Auth. v. Canada, (1991), [1992] 1F.C. 440; Graeme Hamilton, *Great Whale Needs OK from Ottawa, Court Rules*, THE GAZETTE (Montreal), Sept. 11, 1991 at A1.

62. *Id.* See *infra* part VII.B.2. for a discussion of the EARP. Whether the federal government has authority to stop the projects under the EARP is undecided. Ottawa may not want authority to stop the projects because of the delicate constitutional situation, with Québec threatening to declare its sovereignty from Canada. The EARP requires that the assessment process be initiated "as early in the planning process as possible and before irrevocable decisions are taken." *Environmental Assessment and Review Process Guidelines Order*, 118 CANADA GAZETTE, No. 14, Para. 3, at 2795 (July 11, 1984) [hereinafter *EARP Guidelines Order*].

63. The "generally accepted view" of treaty interpretation is that "Indian treaties should be given a fair, large and liberal construction in favor of the Indians." *Simon v. R.* (1985), 24 D.L.R. (4th) 390, 401 (citing *Nowegijick v. R.* (1983), 144 D.L.R. (3d) 193 and *Jones v. Meehan*, 175 U.S. 1, 11 (1899)).

V. UNITED STATES AND CANADIAN ELECTRICITY TRADE

Since 1970, United States utilities have purchased increasing quantities of electricity from Canadian utilities.⁶⁴ Such purchases have occurred primarily because Canadian provincial utilities had electricity that was surplus to their needs and could offer it to United States utilities at a price which was less than what it cost United States utilities to produce electricity in their own power plants.⁶⁵ However, it is undisputed that the import of Canadian electricity to the United States has also accelerated the development of hydroelectric dams in Northern Québec.⁶⁶

That United States contracts with Hydro-Québec will necessitate new developments in Canada is clear because of the size of the contracts and the nature of the power promised in the agreements. Of the two basic types of purchase agreements between United States and Canadian utilities, one, consisting of economy and surplus energy contracts, generally allows United States utilities to displace generation at their own existing generating facilities.⁶⁷ This type of agreement does not necessarily require building new capacity in Canada, although it may. Instead, United States utilities take delivery of Canadian energy under the contract when it is available and less expensive than their domestically generated power.⁶⁸

The other type of purchase agreement, consisting of firm power and firm energy contracts, provides with certainty that generation capacity exists to meet the needs of the United States utility.⁶⁹ With these contracts, the United States utility can rely on the capacity purchased almost as it would on its own internally generated capacity.⁷⁰ By entering into a Canadian contract for both firm energy and firm power the United States

64. See generally, UNITED STATES GENERAL ACCOUNTING OFFICE, CANADIAN POWER IMPORTS - A GROWING SOURCE OF U.S. SUPPLY 12-23 (Apr. 1986). [hereinafter U.S. GAO CANADIAN POWER IMPORTS] "Net imports of Canadian electricity grew from 2.4 million megawatt hours (MWH) in 1970 to 39.5 million MWH in 1984." *Id.* at 3.

65. UNITED STATES GENERAL ACCOUNTING OFFICE, CANADIAN POWER IMPORTS - UPDATE ON ELECTRICITY IMPORTS IN THE NORTHEAST 2 (March 1989) [hereinafter U.S. GAO ELECTRICITY IMPORTS].

66. See QUÉBEC MINISTÈRE DE L'ÉNERGIE ET DES RESSOURCES, ENERGY: DRIVING FORCE OF ECONOMIC DEVELOPMENT 3 (1988) ("Proceeding ahead of schedule for the construction of all the power plants in Hydro-Québec's installations program was made possible by the effective canvassing of export markets.")

67. U.S. GAO CANADIAN POWER IMPORTS, *supra* note 64, at 16.

68. *Id.* "Generally, economy transactions are . . . hours in duration while surplus sales may cover several years." *Id.*

69. *Id.* "A firm power contract requires the Canadian utility to make generating capacity available to the United States utility on demand during the contract period." *Id.* at 17. A firm energy contract requires the Canadian utility to deliver a specific amount of energy over an agreed upon period of time. *Id.*

70. *Id.* at 17.

utility avoids the siting and permitting requirements for construction of new generating facilities in the United States and any accompanying adverse public relations. The most recent United States contracts Hydro-Québec has negotiated in the past few years, including the contract with Central Maine Power Company, have had provisions for firm energy and firm power.⁷¹ Such firm contracts require the construction of additional generating facilities in Canada. A large enough contract for economy or surplus energy, such as the purchases involved in the NEPOOL Phase I and II EIS, would also require building additional Canadian capacity.

VI. UNITED STATES STATE AND FEDERAL REQUIREMENTS

A. *Maine—The Public Utilities Commission Decision*

1. Overview

On January 9, 1989, almost two years after Central Maine Power had applied for approval, the Maine Public Utilities Commission turned down the Company's request for a Certificate of Public Convenience and Necessity for its contract to import power from Hydro-Québec.⁷² The PUC decided that CMP had not proven that a Hydro-Québec purchase would be less costly to customers than the alternatives of conservation and in-state power production from qualifying facilities (QFs). It is important to understand what the Commission did not decide: it did not decide that Maine should not import power from Hydro-Québec's James Bay projects. The true extent of the Commission's decision was that the two principal alternatives to Hydro-Québec— energy conservation and power from cogeneration and small power production— had not been adequately explored.⁷³ Although the denial of the permit had the effect of preventing CMP from continuing in the Hydro-Québec contract,⁷⁴ it

71. *Order, supra* note 3, at 9.

72. *Id.* at 2. The Hydro-Québec proposal included the siting and construction of a new high voltage transmission line. Before construction on the line could begin, the PUC would have had to issue two Certificates of Public Convenience and Necessity: one for the contract, and one for the transmission line. Because the PUC did not issue a Certificate for the contract, there was no proceeding on the transmission line. Other Maine agencies that would have had to issue permits for the transmission line to be built include the Department of Environmental Protection (DEP), the Land Use Regulatory Commission, and the Department of Transportation. The laws and regulations of these agencies as they would have applied to the proposed transmission line are not examined in any depth in this paper because no formal proceedings before the agencies had taken place before the PUC rejection. However, it is clear that DEP intended no examination of global impacts related to the source of power, only the transmission line. *See* MAINE STATE PLANNING OFFICE, PRELIMINARY REPORT ON THE EFFECTS OF THE PROPOSED PURCHASE OF POWER FROM HYDRO-QUÉBEC, Appendix 2-A, at 1 (May 19, 1987).

73. *Order, supra* note 3 at 2.

74. Delays in the permit approval and construction schedule caused by the PUC rejection

was not the PUC's purpose to preclude a Hydro-Québec purchase. In announcing its decision, the PUC carefully explained that a Hydro-Québec contract was likely to be approved in the future.⁷⁵

The PUC expressly stated in its decision that it had received no expert testimony on environmental impacts.⁷⁶ However, the Commission did agree that testimony by two witnesses as to the nexus between global warming and energy resource planning was credible and rational.⁷⁷ Yet, in no way did the PUC attempt to consider in its evaluation of costs any of the global environmental costs related to the development of hydroelectric resources in Canada.⁷⁸ The PUC did not even consider environmental costs that would be associated with environmental impacts from a Hydro-Québec transmission line or from the alternatives.⁷⁹

At the heart of the decision was nothing more than CMP's refusal to sit down and negotiate with QFs, consisting of cogenerators and small power producers, to determine price and availability just as CMP had

meant that Hydro-Québec could not expect to start delivery of contracted energy before the scheduled initial date of delivery (IDD), even if a transmission line to Maine were ultimately approved. Since the contract contained a provision allowing either CMP or Hydro-Québec to pull out of the contract without penalty if the transmission line did not meet an IDD of Dec. 31, 1993, *Order, supra* note 3, at 15, Hydro-Québec canceled the CMP contract on Oct. 17, 1989. *Canadian Utility Will Cancel Contract with CMP*, PORTLAND PRESS HERALD, Oct. 17, 1989, at 30. Due to a law enacted while the Hydro-Québec proceeding was pending, an electric utility now may not enter into such a contract for a large purchase without first obtaining the Certificate of Public Convenience and Necessity. ME. REV. STAT. ANN. tit. 35-A, § 3133-A (West 1988). The signing of the Hydro-Québec contract had become a media event before a single permit for the proposal had been issued, raising questions of propriety.

75. Re Central Maine Power Co., No. 88-111, slip op. at 2-3 (Me. P.U.C. Jan. 9, 1989). The Commissioners stated:

Notwithstanding our denial, it is clear that Canadian power has and will continue to be an important part of Maine's electric energy mix. Our denial of this particular contract does not mean that new sources of power from Hydro-Québec will be absent from our future. Indeed, given Hydro-Québec's enormous hydro-electric resources and the fact that we share a common border makes it more likely than not that truly competitive power contracts can be successfully consummated with Hydro-Québec in the future.

Id.

76. *Id.*

77. *Id.* Notwithstanding, in response to testimony by the PUC staff of the likelihood of fundamental changes in global energy perspectives and a resultant fall in load requirements, the Commission concluded that none of the Company's energy resource plans, including the Hydro-Québec purchase, was inherently inconsistent with a zero load growth scenario, and also that neither the Hydro-Québec plan nor the likely alternatives would be likely to exacerbate the greenhouse effect. *Id.*

78. *Order, supra* note 3, at 77.

79. See *id.*, at 102; see also Re Central Maine Power Co., No. 87-268, slip op. at 2-3 (Me. P.U.C. Feb. 9, 1988) (Hearing Examiner's Evidentiary Ruling). Docket No. 87-268 was the Hydro-Québec proceeding after the first refiling, but before the refiling that acquired the final docket number, 88-111. Because CMP was allowed to withdraw and refile its petition twice, the Hydro-Québec proceeding was spread over three dockets.

done with Hydro-Québec. The Commission had instructed CMP in written orders more than once during the proceeding that the Company must negotiate.⁸⁰ To the Commission, the benefits of Hydro-Québec appeared slight and if CMP had adequately explored the conservation and QF alternatives, it appeared the Hydro-Québec alternative would have fared worse.⁸¹

Despite the deficiency in CMP's case, the Hydro-Québec proceeding was a lengthy, complex and expensive proceeding. It was also accompanied by an extraordinary public relations campaign, much of which was devoted to convincing the public "that Maine needs the additional power and that Hydro-Québec is a good deal for the people. . . . It's inexpensive and reliable, and the environmental impacts of a power line are minimal."⁸² In a February 1991 rate case decision, the PUC allowed CMP to recover in its rates the approximately \$10 million it had spent in promoting the Hydro-Québec project, including the public relations campaign.⁸³ The legal framework for the PUC decision in the Hydro-Québec is more closely examined below.

2. Least Cost Planning

Maine statutory law and PUC regulations require electric utilities to engage in least cost planning.⁸⁴ As part of least-cost planning, PUC rules require each major electric utility in Maine to file a set of energy resource plans that analyze the way generating units, purchased power, and energy management programs are used "to meet the utility's projected demands with the lowest practicable operating and capital costs."⁸⁵ Creating and following the plan with the lowest costs is least-cost planning.

80. *Order, supra* note 3, at 114-116. "The only way to determine whether specific proposals can compete with Hydro-Québec is to continue negotiations with QFs. In our view ME. REV. STAT. ANN. tit. 35-A, §§ 3305(1) & 3306(2) (West 1988), and rules promulgated thereunder, require CMP to negotiate in good faith with QFs." *Order, supra* note 3, at 116 (citing *Re Central Me. Power Co.*, No. 88-111 slip op., at 4-5 (Me. P.U.C. June 7, 1988) (Order Denying No Thank Q Hydro-Québec's Motion for Judgment).

81. *Order, supra* note 3, at 2.

82. RANDY WILSON, *CMP's \$10 Million Sales Pitch*, 21 MAINE TIMES, No. 10, 1, at 12 (Dec. 9, 1988) (quoting CMP's Director of Public Relations).

83. *Re Central Maine Power, Co.*, No. 90-076, slip op. (Me. P.U.C.) (Proposed Increase in Rates).

84. *Re Least Cost Planning Performance Proposals*, No. 88-310, slip op. at 1 (Me. P.U.C. Jan. 6, 1989) (Order Commencing Rulemaking - Chapter 382) (citing the Maine Energy Policy Act of 1988, ME. REV. STAT. ANN. tit. 35-A, § 3191; Me. P.U.C. Reg. 360 and Reg. 380; and provisions of the Electric Rate Reform Act, ME. REV. STAT. ANN. tit. 35-A, § 3153-A).

85. RICHARD B. PARKER, *Will the Electric Company Learn to Love Energy Efficiency? A Policy Experiment at the Maine PUC*, 36 MAINE BUSINESS INDICATORS, No. 2, at 2 (1991).

The goal of least cost planning is “to minimize the total cost of serving the expected total set of customer requirements for light, heat, cooling, motor drive and other services of electricity.”⁸⁶ In its analysis, the utility must consider not only what it would cost to build and operate its own power plants, but also alternatives to new power plants, such as purchasing power from other sources, utility-sponsored conservation, and load management.⁸⁷ As it is currently implemented, least cost planning does not expressly take into account the social or environmental costs of the source, unless they directly impact upon rates.⁸⁸

3. Small Power Production and Cogeneration

The Small Power Production and Cogeneration Act was enacted in 1987 to reduce the Maine’s dependence on fossil fuels for its energy use,

86. *Id.* Dr. Parker, Director of the Maine PUC Technical Analysis Division, explains that a paradox would seem to exist in that least cost may not always mean lowest rates: because a utility faces fixed costs for maintaining its infrastructure, fewer kilowatt hours sold means that each kilowatt hour must now cost more in order to cover the fixed costs. In addition, because utility-sponsored efficiency measures incur most costs as capital expenditures for items such as insulation and improvements in lighting and motors, their greatest rate impacts occur up front in the early years of the measures’ lives. *Id.* However, the upward rate impacts of customers who do take advantage of energy management are more than offset by the reduction of the bill from the kilowatt-hours saved, relative to what the new and more expensive power supply would have cost had conservation not been pursued. *Id.* Even customers who do not participate in utility-sponsored efficiency programs benefit if they do not incur increased rates that would be caused by expensive new power supply sources. In 1991, a utility-initiated bill by was drafted for the Maine Legislature that would have made “least cost” mean “lowest rates,” forcing the PUC to abandon the least total cost approach to providing energy services. See Central Maine Power Co., Draft Titles (filed at Me. P.U.C. Jan. 7, 1991).

87. Parker, *supra* note 85, at 2.

88. Insofar as the Maine Department of Environmental Protection (DEP) is empowered to modify facilities in location, size, character or design under ME. REV. STAT. ANN. tit. 38, § 484 (West 1988) the PUC would reopen its original decision and again make specific findings with regard to the need for the facilities. Title 35-A, § 3133(7). The Commission could have considered the impact to the Maine economy of importing Hydro-Québec power versus producing it in the state. *Order, supra* note 3, at 122. Basing a decision on such testimony is permissible under Maine law, but not required. *Id.*, at 118; ME. REV. STAT. ANN. tit. 35-A, § 3133(9) (West 1987 & Supp. 1990). The statute states in part:

Imported power. In its review of any petition filed on or after January 1, 1987, for approval of the purchase of generating capacity or energy from outside the State, the commission may consider the comparative economic impact on the State of production of additional power within the State, investments in energy conservation and the purchase of the power from outside the State.

The Office of the Public Advocate, part of the executive department and answerable to the governor, had originally intended to address these economic issues in its direct case. Request for Reconsideration, letter from Public Advocate to Commission at 3 (February 10, 1988). However, the only attempt to quantify the overall impact on the state, appearing in two studies performed by the State Planning Office (SPO), was never offered for the truth of the matters contained in the studies. *Order, supra* note 3, at 122. Even though the SPO studies would have led the PUC to conclude that the net economic effects of QFs and conservation would be superior to the Hydro-Québec proposal, the Commissioners did not consider them in its opinion since the studies were not part of the evidentiary record. *Id.*

to diversify energy resources, and to encourage the development of small energy production and cogeneration facilities.⁸⁹ The Act provides for the sale of electricity by QFs, or small power producers and cogenerators, to electric utilities without the prior approval of the Commission.⁹⁰ If a QF and an electric utility cannot agree to a contract or price, on request of one of the parties, the PUC will require the utility to purchase the power from the QF at the avoided cost.⁹¹

The cost that a utility pays to a QF cannot exceed the cost of the electric energy that the utility would generate or purchase from another source if it were not buying the power from the QF.⁹² This avoided cost is calculated by the utility, subject to review and approval of the PUC.⁹³

The statutory requirements with respect to qualifying facilities played a role in the Hydro-Québec proceeding. In the spring of 1987, CMP issued a Request for Proposals (RFP) for the purchase of QF power to fill the 7th and 8th decrements (87-A and 87-B).⁹⁴ The response to the RFP was so great that it immediately raised questions as to the need for a Hydro-Québec purchase. On the other hand, a large purchase from Hydro-Québec would clearly negate the need for purchases from QFs.⁹⁵

Because the proceedings were so closely related, the avoided cost proceeding was eventually wrapped into the Hydro-Québec proceeding.⁹⁶ Throughout the proceeding, the reasonableness of CMP's projected avoided costs was heavily disputed. Factors such as price stability and dispatchability made Hydro-Québec appear to CMP to be a more attractive alternative. However, as in least cost planning, factors such as environmental impacts did not appear to play a part in calculating avoided costs, and probably would not play any such part today.

89. ME. REV. STAT. ANN. tit. 35-A, § 3302 (West 1988).

90. Title 35-A, § 3305.

91. Title 35-A, § 3306. A qualifying facility may be either a cogenerator or a small power producer.

92. Title 35-A, § 3307.

93. CMP filed its annual long-term avoided cost estimates, during the Hydro-Québec proceeding on October 30, 1987, in accordance with Chapter 36 of the PUC's rules. Thus, the utility avoids building a new power plant if the QF can build a plant and produce the power at the same cost as, or at a lower cost than, it would cost the utility to produce it. A utility fulfills its statutory obligation to purchase power from qualifying facilities by filling decrements, or blocks of power consisting of a certain amount of capacity that the utility expects it will need.

94. *See generally, Order, supra* note 3, at 117. These decrements are blocks of power-generating or power-displacing capacity, approximately 50 MW in CMP's case.

95. *Id.*

96. The avoided cost proceeding was Docket No. 87-261.

4. Maine Energy Policy Act

The Maine Legislature enacted The Maine Energy Policy Act of 1988 (MEPA) while the Hydro-Québec hearings were being held at the PUC.⁹⁷ MEPA codifies least cost energy planning and requires a comparative analysis of the alternatives. If available alternatives for energy are equivalent, MEPA requires the Commission to give preference first to conservation and demand management and then to power purchased to qualifying facilities.⁹⁸ Thus, in order to receive PUC approval for the Hydro-Québec purchase, CMP had to show that Hydro-Québec was superior (i.e., not "equivalent") to demand-side alternatives and power purchased from qualifying facilities.⁹⁹ The wording of MEPA expressly allows for the consideration of factors such as cost, risk, and diversity of supply.¹⁰⁰

5. Certificate of Public Convenience and Necessity

Maine public utility law requires that a utility obtain a Certificate of Public Convenience and Necessity (Certificate) for a major purchase of generating capacity or energy.¹⁰¹ Whenever a utility proposes to purchase "any generating capacity, transmission capacity or energy," the

97. Title 35-A, § 3191, states:

Energy Policy

The Legislature finds that it is in the best interests of the State to ensure that Maine and its electric utilities pursue a least-cost energy plan. The Legislature further finds that a least-cost energy plan takes into account many factors including cost, risk, diversity of supply and all available alternatives, including purchases of power from Canadian sources. When the available alternatives are otherwise equivalent, the Commission shall give preference first to conservation and demand management and then to power purchased from qualifying utilities. Nothing in this section is intended to modify the Commission's authority under section 3133, subsection 9.

98. *Id.*

99. *Order, supra* note 3, at 29.

100. And if interpreted broadly, the wording might include the sustainability of the resource, and whether the resource would contribute to increased pollution, should the PUC choose to examine these factors.

101. ME. REV. STAT. ANN. tit. 35-A, § 3133 (West 1987). A discussion of other states' legal frameworks for importing Hydro-Québec power is beyond the scope of this paper, but it should be noted that depending on the state, the legal requirements may be minimal. For example, the New York Power Authority is authorized by state statute to import power for resale to utilities without approval of the New York Public Service Commission. N.Y. PUB. AUTH. LAW § 1014 (Consol. Supp. 1991). Thus, in New York, without a regulatory context for evaluating a Hydro-Québec purchase, opposition to the James Bay projects has escalated into a political battle, taking the form of coalition work, grassroots organizing and media publicity. *See, e.g., N.Y. TIMES*, Oct. 21, 1991, at A15 (full-page ad, *Mario Cuomo, American Express and Catastrophe at James Bay*). Hydro-Québec has responded with its own public relations blitz. *See, e.g., N.Y. TIMES*, Oct. 24, 1991, at B5 (full-page ad, *James Bay: Let's Talk Sensibly*). New York finally agreed to do an environmental impact assessment and hold public hearings under N.Y. ENVTL. CONSERV. LAW §§ 8-0101-0113 (Consol. 1991), but it is not clear that the scope of the inquiry includes impacts in Canada. Daley, *New York to Reassess Hydro Deal*, RUTLAND HERALD, Nov. 6, 1991; New York State Department

PUC must “make specific findings with regard to the need for the purchase.”¹⁰² This was the focus of the PUC proceeding. The requirement of specific findings compels the Commission “to decide whether the particular facilities proposed are necessary.”¹⁰³ Similarly, whenever a utility proposes to build a new generating facility or transmission line itself or enter into in a large power purchase contract, it must demonstrate to the Commission that the resource is part of the utility’s overall least cost plan before the Commission will issue a Certificate.¹⁰⁴

Central to the Commission’s decision disapproving CMP’s Petition for a Certificate was its determination of which party had the burden of proof. The Hearing Examiners recommended that the burden of proof, as to whether the alternatives of conservation and QF power were equivalent or superior to the proposed Hydro-Québec purchase, be placed on the proponents of particular alternatives and recommended approval of the Hydro-Québec purchase.¹⁰⁵ The Commission disagreed.¹⁰⁶

The Commission ruled that to receive a Certificate, CMP had the burden of persuading the Commission that the Hydro-Québec purchase was consistent with a least cost plan.¹⁰⁷ In previous orders issued in the Hydro-Québec proceeding, the Commission had stated that this burden required CMP to demonstrate both that it needed Hydro-Québec’s power and that the purchase was the least cost source.¹⁰⁸ Further, MEPA, which statutorily established least cost energy planning as state policy, requires that a proposed power purchase be superior to the alternatives of conservation and demand management, and power purchased from

of Environmental Conservation, Notice of Intent to Prepare a Draft EIS and Notice of Public Scoping (Oct. 23, 1991). On March 31, 1992, New York Governor Mario Cuomo canceled the \$19 billion contract for hydroelectric power from Québec. Mark Clayton, *New York says Non to Hydro-Québec; Crees Rejoice*, CHRISTIAN SCIENCE MONITOR, Mar. 31, 1992 at 6.

102. ME. REV. STAT. ANN. tit. 35-A, § 3133(6)(A) (West 1987).

103. *Order, supra* note 3, at 26 (quoting from *Re Central Maine Power Co.*, Nos. U.3238, U. 3239, U. 3356, Slip Op. at 5 (Me. P.U.C. 1979) (Petition for Certificate of Public Convenience and Necessity at Sears Island)).

104. *Order, supra* note 3, at 26. Overcapacity is not determinative; the principal inquiry is whether the plan is least cost over the term of the planning period. *Id.* at 28.

105. *Re Central Maine Power Co.*, Nos. 88-111, 87-261, Hearing Examiner’s Order at 38 (Me. P.U.C. Dec. 14, 1988). Québec Premier Robert Bourassa showed a liking for the same type of burden-shifting procedure when faced with growing opposition to the Great Whale project. “They (the Crees) say we don’t need it (the project),” Bourassa said in a September 1991 interview on Radio-Canada’s Le Point program. “Let them prove it.” Phillip Authier, *Great Whale must go ahead: Premier; Inconveniences on the Lifestyle of a Few Hundred People*, THE GAZETTE (Montreal), Sept. 17, 1991, at A7.

106. *Order, supra* note 3, at 36.

107. *Id.* at 29.

108. *Id.*

QFs.¹⁰⁹ This statute implicitly requires the utility to explore the alternatives thoroughly and to demonstrate the superiority of the utility's proposal.

CMP's preliminary burden concerning the overall comparisons of alternatives to Hydro-Québec obligated CMP to come forward with affirmative evidence consistent with its least cost planning obligations.¹¹⁰ All other parties had "a lesser burden to raise an issue in a manner sufficient to require that the utility address it."¹¹¹ As the Commission noted in the Order, however, "neither a production burden nor a burden of persuasion necessarily must be met by evidence introduced by the party that has the burden."¹¹² Thus, the Commission viewed the burden of production for virtually all issues to be on the utility.¹¹³ The Commission recognized that the utility takes a risk when it decides whether a party has raised an issue sufficiently to trigger the utility's evidentiary response.¹¹⁴ However, the PUC reasoned that since the utility is the party in the case with the greatest resources and information, the burden is not undue.¹¹⁵

The case analysis raises questions about what the outcome would have been under a differently constituted Commission. The 2-1 decision turned on a narrow point of law concerning the burden of proof, and the dissenting opinion suggested that in a future proceeding, the utility could sidestep the proof problem under MEPA by simply arguing that the alternatives to the Hydro-Québec proposal were impossible to quantify.¹¹⁶

6. Environmental Externalities

The question raised by the emphasis on least cost planning in Maine

109. *Id.* See *supra* part V.A.4.

110. *Order, supra* note 3, at 29.

111. *Id.* at 31-32 (referring to the Order in the Sears Island certificate proceeding, *supra* note 103). As the Commission explained, a production burden requires a party to produce or present enough evidence on an issue, or rely on evidence produced by other parties, to allow the trier of fact to find for that party on the issue. *Id.* at 30 (citing Me. R. Evid. 301, note; for further discussion, the Order refers to *Poitras v. R. E. Glidden Body Shop, Inc.*, 430 A.2d 1113, 1118-1120 (Me. 1981)). A "scintilla" of evidence is not enough to satisfy the production burden. *Id.* (citing Charles T. McCormick, *MCCORMICK ON EVIDENCE* § 338 (ed. Edward W. Cleary, 2d ed. 1972)). In the Hydro-Québec case, in order for CMP to receive a Certificate, it had to meet this threshold burden. *Id.* at 30-35.

112. *Order, supra* note 3, at 31, (quoting *Gendron v. Burnham*, 82 A.2d 773 (Me. 1951); *State v. Smith*, 389 A.2d 314 (Me. 1978)).

113. *Id.* at 31.

114. *Id.* at 33.

115. *Id.*

116. *Id.* at 126. The minority opinion stated, "If the company believed for some reason that it was impossible to present a more definitive examination of cogeneration and conservation, it should have rigorously argued that position."

is whether it is correct not to consider the indirect costs to society of environmental and social impacts from energy supply and use. Many of these costs are not easily quantifiable. An example is the loss of areas of undeveloped territory, whether in western Maine where a transmission line would cut across the mountains or at James Bay, where, until hydro-electric development arrived, no roads interrupted the vastness of nature. However, unless environmental costs are somehow taken into account, least cost planning works against sustainable development. Rather than encouraging efficiency and renewable resources, least cost planning can simply encourage energy generation to gravitate toward regions with the least popular opposition and the fewest environmental protections.

The current membership of the Maine PUC is now openly hostile to incorporating any consideration of environmental costs into electric utility regulation. In 1990, the Maine Legislature attempted to move the PUC closer to adopting a method of incorporating environmental externalities in the energy planning process by enacting an emergency measure entitled "An Act to Require the PUC to Conduct an Analysis of the Comparative Environmental and Economic Impacts of Alternate Energy Resource Plans."¹¹⁷ The Act mandated that the PUC investigate methods of incorporating environmental and economic impacts into the consideration of alternative energy resource plans and develop specific elements of a proposal and a plan for implementing the proposal.¹¹⁸

Notwithstanding the clear directive of the Maine Legislature,¹¹⁹ the majority of the PUC reported back to the Legislature in 1991 without a proposal or plan for implementing the proposal, and instead recommended that externalities should not be included in utility least cost planning.¹²⁰ Commissioner Cheryl Harrington issued a minority report, expressing her disappointment that the PUC had missed the opportunity to determine the range of costs and benefits.¹²¹ With Commissioner Harrington's term with the Commission over, the likelihood that the PUC will incorporate environmental externalities into its decision-making process seems slim unless the Legislature mandates such an approach.

The PUC's outright rejection of the integration of economic and environmental planning and management reflects an outdated, fragmented

117. Priv. & Spec. L. ch. 110, 1989 ME. LAWS 2438.

118. *Id.*

119. Not only is the wording of the statute clear that the PUC was to return with a specific proposal for the Legislature's consideration, the legislative record confirms that expectation. *See* Legis. Rec. 401-02 (2d Reg. Sess. 1990).

120. Me. P.U.C., Report on Environmental and Economic Impacts i-ii (May 1, 1991).

121. Letter from Cheryl Harrington, P.U.C. Commissioner, to the Chairs of the Joint Standing Committee on Utilities (May 1, 1991).

approach to energy planning. Indeed, the criticism by the World Commission on Environment and Development¹²² of governments for their "failure to make the bodies whose policy actions degrade the environment responsible for insuring that their policies prevent the degradation,"¹²³ takes on new meaning when the administrative body itself disobeys the Legislature's directive that is intended to make the body accountable for the impact of its policies. Given the refusal of the Commission even to consider methods of examining environmental externalities, the Legislature should establish by a clearer policy mandate that the global environmental impacts of energy resource alternatives must be taken into account in the energy planning process.

B. *United States Department of Energy*

No federal authorization is required for a United States utility to import Canadian electricity.¹²⁴ In the words of an administrator at the United States Department of Energy (DOE), "the federal government does not regulate imports of electricity."¹²⁵ However, if construction of a border-crossing transmission line is proposed to achieve the import of electricity, the utility must first obtain a Presidential Permit from the DOE.¹²⁶ CMP's Hydro-Québec proposal included the siting and construction of a new high voltage transmission line across the international border between Québec and Maine through the virtually undeveloped western mountain region of the state. The Administrator of the Economic Regulatory Authority (ERA) of the Department of Energy issues a Presidential Permit if the transmission facilities are consistent with the public interest.¹²⁷

122. See *supra* notes 5-20 and accompanying text.

123. OVERVIEW, *supra* note 8, at 15.

124. On the other hand, Section 202(e) of the Federal Power Act of 1935 (FPA) requires that any entity subject to the FPA obtain authorization before it exports electric energy to a foreign country.

125. Letter from Anthony Como, Director of Office of Coal and Electricity, Office of Fuels Program, Fossil Energy, to Pamela Prodan (Oct. 4, 1991) (discussing federal requirements for international electricity trade).

126. The term "Presidential Permit" is now a misnomer. When the permit process started in 1939, it originally required the President's signature. Subsequently, the approval function was transferred to the Chairman of the Federal Power Commission in 1953, to the DOE in 1977, and then to the Administrator of ERA. ECONOMIC REGULATORY ADMINISTRATION, UNITED STATES DEPARTMENT OF ENERGY, ELECTRICITY TRANSACTIONS ACROSS INTERNATIONAL BORDERS - 1984 at 21 (1985).

127. Exec. Order No. 10,485, 18 Fed. Reg. 5397 (1953). The United States Department of Energy describes its regulatory role as follows:

The United States Government requires that a party seeking to construct, operate, and maintain an electric transmission line crossing United States borders to export or import power obtain a Presidential Permit. The Department of Energy (DOE) issues Presidential

As administered by the DOE, there are two major criteria in the review for a Presidential Permit. One is a technical reliability requirement. The DOE requires that the proposal meet the Northeast Power Coordination Council (NPCC) reliability requirements before it will allow the interconnection to operate.¹²⁸ The DOE considers the effect that the proposed project would have on the utility's operating reliability, i.e., the ability of the existing generation and transmission system to remain within acceptable voltage, loading and stability limits during normal and emergency conditions.¹²⁹ However, the DOE does not consider reliability of the source of power in terms of the continued availability of the resource, or the certainty of construction of sufficient future generation capacity to meet future demands. In practice, the reliability requirement is treated as a goal, not a criterion. It is treated as an engineering goal for the applicant to meet by demonstrating that various technical measures have been taken by the time the transmission line operates, rather than criteria that if not met would lead to a denial of the Permit.¹³⁰

The second criterion required for the issuance of a Presidential Permit, is an environmental review. In the United States, the passage of the National Environmental Policy Act of 1969 (NEPA)¹³¹ required each federal agency proposing any major federal action "significantly affecting the quality of the human environment", to include in its report a detailed environmental impact statement (EIS). This must include "any adverse environmental effects which cannot be avoided should the proposal be

Permits with the concurrence of the Departments of State and Defense. The criterion used to evaluate applications for permits is that such facilities must be consistent with the public interest. Considerations of public interest fall into four categories - environment, reliability, trade policy, and national security. The DOE reviews applications with respect to environmental impact and reliability; the Departments of State and Defense review for considerations of trade effects and security, respectively. ENERGY INFORMATION ADMINISTRATION, UNITED STATES DEPARTMENT OF ENERGY, UNITED STATES - INTERNATIONAL ELECTRICITY TRADE 7 (1986). In practice, ERA has never denied a Permit.

128. ECONOMIC REGULATORY ADMINISTRATION, UNITED STATES DEPARTMENT OF ENERGY, ELECTRICITY TRANSACTIONS ACROSS INTERNATIONAL BORDERS - 1990 (1991).

129. *Id.* One of northeastern utilities' concerns with power from Québec has long been the technical reliability of Hydro-Québec's power transmission system, which is vulnerable to power outages because of the great distance electricity is transmitted from the hydroelectric sources. U.S. GAO ELECTRICITY IMPORTS, *supra* note 65, at 6. Since 1969, Hydro-Québec has had ten systemwide failures. *Id.*

130. To illustrate, steps taken toward solving the reliability problem in the case of the New England / Hydro-Québec Phase II interconnection included maintaining sufficient capacity reserves within New England to handle the loss of a 2,200 MW interconnection, incorporating a DC interconnection into the transmission systems between Québec and New England, and constructing the interconnection so that the transmission line and associated generating facilities normally can be operated in isolation from Hydro-Québec's main transmission grid. U.S. GAO CANADIAN POWER IMPORTS, *supra* note 64, at 31-32.

131. 42 U.S.C. § 4321-27 (1988).

implemented."¹³² The language of the statute does not in and of itself limit the affected human environment to that of the United States.

NEPA mandates preparation of an environmental assessment or an EIS at the federal level in order to evaluate the environmental impacts associated with the proposal, and to compare alternatives to the proposal, including the alternative of not building the project.¹³³

Even when they are empowered to consider environmental impacts, federal agencies often narrow the scope of the review under NEPA by concluding that the project would not significantly affect the environment, thereby making the preparation of an EIS unnecessary.¹³⁴ While the federal government's involvement in the transmission of electricity is admittedly small, it is critical, as the denial of the permit would result in the transmission facilities not being built. This factor calls for a far-reaching examination of the potential impacts of a proposal. Unfortunately, courts have upheld the refusal of agencies to take the scope of the EIS beyond the narrow extreme.¹³⁵

The DOE environmental review is geared to the analysis of the impacts of transmission and does not evaluate the consequences of the generation or use of the energy itself. The failure of the DOE to analyze the impacts of importing massive amounts of electric energy, other than the impacts caused by the construction and use of the transmission line, constitutes a serious omission. This flawed analysis means implicit U.S. government sanction of electric utilities' support for the development of large-scale Canadian electric generation projects.

132. 42 U.S.C. § 4332(2)(C) (1988). The DOE must consult with numerous other federal agencies in the permitting process for a transmission line. See Environmental Impact Statement Implementation Plan for the Central Maine Power HVDC Transmission Tie to Hydro-Québec (1988) [hereinafter EISIP].

133. 42 U.S.C. § 4332(2)(C). The statement must include:

- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) alternatives to the proposed action,
- (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- (v) any irreversible and ir retrievable commitments of resources which would be involved in the proposed action should it be implemented.

Id. See also 40 C.F.R. § 1508.25(b) (1991).

134. *Cf.* *Gee v. Boyd*, 471 U.S. 1058 (1985), *denying cert. to* *Gee v. Hudson*, 746 F.2d 1471 (4th Cir. 1984) (dissenting opinion) (pointing out that lower courts have long been in disarray on what standard of review to apply to an agency's decision not to undertake an EIS).

135. See *Winnebago Tribe of Neb. v. Ray*, 621 F.2d 269 (8th Cir. 1980), *cert. denied*, 449 U.S. 836 (1980) (affirming the denial of a request for an injunction to bar construction of a proposed 67-mile power line where the Army Corps of Engineers did not prepare an EIS).

Currently, the DOE takes the firm position that an EIS for a Presidential Permit need not address adverse impacts in Canada.¹³⁶ The DOE does not even acknowledge that it should consider impacts in Canada that would have adverse consequences in the United States, limiting its review to effects within the transmission line corridor.¹³⁷ Nonetheless, the DOE must at least consider some impacts other than those associated with the transmission line, such as damage to populations of migratory birds that travel to the United States, which that could result from granting the permit.¹³⁸ Migratory birds are as much a part of the U.S.' environment as Canada's.

On its face, because of its broad language NEPA can be assumed to apply outside the United States absent a conflict with another statutory duty mandated by Congress, and some courts have so held.¹³⁹ In enacting NEPA, Congress intended to "prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man."¹⁴⁰ An agency is not exempt from compliance with NEPA simply because the effects of an action take place outside the United States. The law states:

[All agencies of the federal government shall] recognize the worldwide and long-range character of environmental problems and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions, and programs designed to maximize

136. EISIP, *supra* note 132, at 4; New England / Hydro-Québec /- 450 kv Transmission Line Interconnection — Phase II: Final Environmental Impact Statement, at vi (1987) [hereinafter NEPOOL Phase II EIS]. The NEPOOL Phase II EIS included an appendix supplied by Hydro-Québec and the applicant in response to comments by the National Audubon Society expressing concern that hydroelectric generation in Canada could have adverse impacts, particularly on migratory waterfowl. See NEPOOL Phase II EIS, *supra* Appendix C. Asserting that DOE need not examine environmental impacts in Canada, DOE nonetheless concluded, based on the submission by Hydro-Québec and the applicant, that the generation of energy for Phase II Contract sales to NEPOOL would have no adverse impact on the habitats or populations of migratory bird species that utilize the James Bay region as a staging area in migrations to or from the United States and points beyond. NEPOOL Phase II EIS, *supra* at C-11.

137. EISIP, *supra* note 132, at 4. The Department's regulations only require the applicant to submit information in regards to the transmission lines. 10 C.F.R. § 205.322(b) (1991). A statement of the environmental impacts of the proposed facilities is required, as is "[a] list of threatened or endangered wildlife or plant life which may be located in the proposed alternative." 10 C.F.R. § 205.322(c)(4) (1991).

138. ROSENTHAL & BEYEA, *supra* note 24, at 29. See *In the Matter of Philadelphia Elec. Co.*, 10 N.R.C. 437 (1979), ("We are prepared to accept the proposition that, where major federal action is involved, related activities undertaken abroad that can have a significant impact on the environment of this country are within NEPA's ambit."). *Id.* at 446.

139. See *Sierra Club v. Adams*, 578 F.2d 389, 396 (D.C. Cir. 1978) (NEPA required a thorough discussion of the cultural impacts of the Darion Gap Highway in Panama and Columbia on the Cuna and Choco Indians); *Lake Erie Alliance v. U.S. Army Corps of Engineers*, 526 F. Supp. 1063, 1077-78 (W.D. Pa. 1981), *aff'd mem.*, 707 F.2d 1392 (3d Cir.), *cert. denied*, 104 S. Ct. 277 (1983).

140. 42 U.S.C. § 4321 (1970).

international cooperation in anticipating and preventing a decline in the quality of mankind's world environment.¹⁴¹

Because none of the procedures outlined in NEPA contain qualifiers that could be interpreted as territorial limitations, these procedures indicate that assessment of environmental consequences was intended to be an important aspect of federal agencies' planning of activities having impacts outside the U.S.¹⁴²

Because the granting of a Presidential Permit to build a transmission line for the delivery of Hydro-Québec contract power would have a direct impact on Hydro-Québec's construction schedule,¹⁴³ the DOE must examine the environmental impacts caused by granting the permit. Even if it does not consider the extraterritorial effects, such as those visited upon the Cree people and the wildlife of the James Bay region, the DOE cannot avoid examination of the impacts in the United States of issuing the Permit. These impacts would have to include the effects on migratory waterfowl in the United States and the effects of large-scale hydroelectric development on global warming.¹⁴⁴

There is also a basis in Executive Order 12,114 for the international application of NEPA.¹⁴⁵ However, during the Hydro-Québec proceeding, the DOE maintained that building a transmission line to interconnect with and import power from Canada does not fall into any of the criteria under Section Z of Executive Order 12,114 under which international application of NEPA applies.¹⁴⁶ In addition, the DOE claimed that "various environmental reviews are conducted by Canadian utilities, provincial governments, and the Canadian federal government whenever a major project is proposed for development The Canadian government provides opportunities for the expression of public concern about

141. 42 U.S.C. § 4332(2)(F) (1988).

142. Comment, *The Extraterritorial Scope of NEPA's Environmental Impact Statement Requirement*, 74 MICH. L. REV. 349, 364 (1975).

143. See discussion of impact of export contracts on construction schedule *supra* note 66.

144. See discussion on global warming *supra* note 26.

145. Exec. Order No. 12,114, 44 Fed. Reg. 1957 (1979) directs every federal agency to publish appropriate procedures for evaluating the environmental impacts of major federal actions outside the U.S., specifically, "actions significantly affecting the environment of the global commons outside the jurisdiction of any nation (e.g. the oceans or Antarctica)." The failure of the order to expressly recognize other components of the global commons should not necessarily prevent the application of this order to the atmosphere and other parts of the global ecosystem, such as migratory wildlife outside the jurisdiction of a single nation. The oceans or Antarctica are meant only to be examples. Although migratory shorebirds have been the subject of the long-standing the 1916 Migratory Bird Treaty between the United States and Canada, encoded at 16 U.S.C. § 703, which recognized their international status, the applicability of the implementing statute, the Migratory Bird Treaty Act, to James Bay is not clear. ROSENTHAL & BEYEA, *supra* note 24, at 29. However, the existence of the treaty reinforces the basis for the DOE to consider effects on migratory wildlife.

146. EISIP, *supra* note 132, at 4.

the environment in those proceedings.”¹⁴⁷ As discussed elsewhere in this paper, the Canadian review process is deficient in many ways, including the public review component, which is not mandatory.¹⁴⁸

In the CMP EIS process, the DOE refused to even consider the environmental impacts of the James Bay projects. However, in the NEPOOL Phase II EIS process, the DOE had treated the question of environmental impacts from the projects as a factual issue.¹⁴⁹ Based on information submitted by Hydro-Québec and the applicant, the DOE concluded that no significant adverse impacts in the James Bay region had occurred or were projected to occur because of the operation of existing or proposed hydroelectric facilities at James Bay.¹⁵⁰ Both approaches are fundamentally flawed.

When courts hold that NEPA does not apply extraterritorially,¹⁵¹ they generally reason that a longstanding doctrine, called the Foley doctrine, prevents the extraterritorial application of United States laws on the grounds that such application would result in a clash with the laws of foreign nations.¹⁵² However, such a sovereignty argument fails because the EIS process by which an agency takes account of the environmental impact of a project occurs in the United States. International application of NEPA would only require that federal agencies scrutinize actions that might affect the environment. Such a process does not interfere with a foreign country’s laws.

Even if Congress did not intend NEPA to apply extraterritorially, the wording of the Endangered Species Act (ESA)¹⁵³ is much clearer in this respect.¹⁵⁴ Section 7 of the ESA requires that federal agencies take no action that would jeopardize any endangered or threatened species or its habitat.¹⁵⁵ Lower courts have interpreted Section 7 of the ESA to be

147. *Id.* at 4.

148. *See supra* Part III, notes 38-63 and accompanying text.

149. *See* Response to comments of National Audubon Society, NEPOOL Phase II EIS, *supra* note 136, at C-11, F-66.

150. *Id.*

151. *Envtl. Defense Fund v. Massey*, 141 F. Supp. 1296 (D.D.C. 1991). *See* *United States v. Mitchell*, 553 F.2d 996 (5th Cir. 1977) (holding that if environmental legislation is to be applied outside the boundaries of the United States, Congress’s intent that it be so must be clearly expressed).

152. *See* *Foley Bros. Inc. v. Filarso*, 336 U.S. 282 (1949).

153. 16 U.S.C. §§ 1531-44 (1991).

154. *Contra* Justice Stevens, concurring in *Lujan v. Defenders of Wildlife*, 112 S. Ct. 2130 (1992) (failing to reach the question of extraterritorial application of Section 7, denying plaintiffs standing.)

155. Section 7 of the Endangered Species Act of 1973 requires consultation with the Department of the Interior:

[E]ach Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an “agency action”) is not likely to jeopardize the continued existence

unequivocal in the ESA's application to foreign soils.¹⁵⁶

In *Tennessee Valley Authority v. Hill*, the Court held that Section 7 is plain and unambiguous and the "language admits of no exception."¹⁵⁷ However, the DOE and the Department of the Interior have not applied the ESA as Congress intended.¹⁵⁸ Pursuant to the ESA, the DOE requests, and the Department of the Interior provides, information on the presence of federally listed and proposed endangered or threatened species known to exist within the project area, the transmission line corridor.¹⁵⁹ Yet the ESA defines "endangered species" without geographic limitation.¹⁶⁰ Thus, the DOE's contention that it need consider only the impacts of the transmission line and not the environment outside the United States is incorrect. Under the ESA, the agency should consider whether the granting of a Presidential Permit will affect *any* endangered or threatened species, regardless of whether the species "located in the proposed alternative."¹⁶¹ For Congress to require the listing of all species worldwide that are endangered, and then not to require federal agencies to take protective action would be senseless.

Finally, aside from the deficiencies in the DOE's review, another major fault with the Presidential Permit process is that the magnitude of the impacts of the required electrical energy development at the source is irrelevant to the authority of the federal government to evaluate an import proposal. Only the proposal of a new transmission line crossing the border will trigger the federal permitting process. By way of example, while the CMP contract with Hydro-Québec required a Presidential Permit because it involved the construction of a tie line interconnecting the utilities, the equally massive New York Power Authority contract with Hydro-Québec does not require one. The New York contract involves

of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species. . . . 16 U.S.C. § 1536(a)(2) (1991).

156. John L. Beiers, Comment, *The International Applicability of Section 7 of the Endangered Species Act of 1973*, 29 SANTA CLARA L. REV. 171, 202 (1989). See *Defenders of Wildlife v. Lujan*, 911 F.2d 117 (8th Cir. 1990), *rev'd on other grounds*, *Lujan v. Defenders of Wildlife*, 112 S. Ct. 2130 (1992).

157. Comment, *supra* note 142 (quoting *Tennessee Valley Authority v. Hill*, 437 U.S. 153, 173 (1978)).

158. The United States Fish and Wildlife Service and the National Marine Fisheries Service at one time issued a joint rule requiring that every federal agency "insure that its activities or programs in the United States, upon the high seas, and in foreign countries will not jeopardize the continued existence of a listed species." 43 Fed. Reg. 874 (1978) (to be codified at 50 C.F.R. § 402.01) (emphasis added). The rule was changed in 1986 to reinterpret Section 7 to require consultation only for actions taken in the United States or on the high seas. *Defenders of Wildlife*, 911 F.2d at 118.

159. See 10 C.F.R. § 205.322(c) (1991).

160. *Defenders of Wildlife*, 911 F.2d at 123.

161. 10 C.F.R. § 205.322(c) (1991).

purchases over existing transmission lines.¹⁶²

In sum, the DOE presently interprets the federal legal framework to allow the United States government to disassociate itself entirely from what the environmental impacts might be in Canada.¹⁶³ Such an approach only prolongs the inability of institutions to come to grips with the need to treat the planet as one system made up of many ecosystems transcending artificial boundaries. So long as such a narrow perspective reigns as to what constitutes the legitimate scope of investigation into environmental impacts on the human environment, huge, foreign, energy-related projects will continue to be seen by United States utilities and investors as feasible and attractive, and developing sustainability will be an unattainable goal.

Since the world community of nations has failed to address the most serious problems of ozone depletion, destruction of habitat, pollution, and climate change, it is imperative that each nation analyze the boundary-transcending implications of its decisions. The DOE should broaden its scope of inquiry into large-scale importation of energy and fully consider the cumulative environmental impacts of such imports in the context of whole ecosystems. In addition, the federal government should pass new legislation prohibiting investments in large scale energy developments both inside and outside the United States unless it is demonstrated that the developments will not compromise the ability of future generations to meet their own needs. Only then can it fairly be said that the United States government is willing to take responsibility for the impact of energy policies that cause environmental damage.

VII. CANADIAN PROVINCIAL AND FEDERAL LAW

A. *Québec Law*

In Québec, the constant struggle of Canadian environmental groups

162. To further illustrate the problem that, as implemented by the DOE, the federal permitting process involved in electricity imports is not in any way intended to regulate or take account of the magnitude of the consequences of the generation, transmission or use of the energy, but rather simply the effects of the construction and ongoing maintenance of the energy transmission facilities, contrast the lack of DOE review of the two blocks of 500 MW under the New York Power Authority's multi-billion dollar deal with Hydro-Québec, with that involved in DOE Docket PP-81. The latter did require a Presidential Permit, which was issued on September 24, 1984 to Maine Public Service Co., "authoriz[ing] the extension of a 7.2 kV distribution line from the New Brunswick Electric Power Commission to provide electric service to a [single] isolated residence in the United States." See ECONOMIC REGULATORY ADMINISTRATION, UNITED STATES DEPARTMENT OF ENERGY, *supra* note 126, at 16-17.

163. See Response to comments filed by National Audubon Society, NEPOOL Phase II EIS, *supra* note 136, at 4-20 - 4-25.

against the first James Bay projects forced the Québec provincial government to institute environmental protection policies and requirements where previously none had existed.¹⁶⁴ However, it has been relatively easy for utilities to obtain waivers of environmental requirements, and the proponents of the projects have largely been responsible for preparing their own environmental impact assessments. Further, in Québec, since an environmental assessment for a hydroelectric project is prepared only after a decision to proceed has been made, the study necessarily can serve only to mitigate the severity of a proposed project. Québec law requires no more than mitigation; there is no provision in Québec law for the rejection of a hydroelectric project. In that sense there is a presumption that all hydroelectric development is necessary, and that any adverse effects can be mitigated.

The Québec Environmental Quality Act contains particular provisions that apply to the James Bay Region, south of the 55th parallel, including certain principles that are supposed to be duly considered.¹⁶⁵ The principles include the protection of: hunting, fishing and trapping rights; native people, their societies, communities and economy; the environment; and wildlife.¹⁶⁶ Perhaps most importantly, the Act requires the various committees and governmental entities to give due consideration to the principle of “the participation of the Crees in the application of the environmental and social protection regime provided for” in the Act.¹⁶⁷

The regime provides for participation of the Cree in Evaluation and Review Committees that make recommendations regarding the advisability of submitting or not submitting projects to the review and assessment procedure.¹⁶⁸ The Committees make recommendations to the Minister

164. Jan Beyea et al., *Long-Term Threats to Canada's James Bay from Hydroelectric Development*, 16 INFORMATION NORTH, No. 3, at 4 (Sept. 1990) [hereinafter *Long-Term Threats*].

165. See R.R.Q. (1981), c. Q-2, r. 152, S.Q. 261 (Butterworths). This is the regulation pursuant to the Québec Environmental Quality Act, R.S.Q. c. Q-2, amended by S.Q. 1009, C-26, respecting the environmental and social impact assessment and review procedures applicable to the territory of James Bay and Northern Québec. Section 3 of the rule describes two types of impact assessment statements, the first, a preliminary statement evaluating the alternatives for the *site* of a project, and the second, a detailed statement evaluating all the effects of the *accepted* project on the environmental and social milieu. Section 5 describes required elements of any environmental and social impact statement, including descriptions of environment and social milieu, evaluation of the impacts the project is likely to have, descriptions of reasonable alternatives to the site of the project, reasonable alternatives to certain elements of the project, and corrective and restorative measures to reduce or minimize negative effects of the project.

166. *Id.*

167. R.R.Q. (1981), c. Q-2, r. 152(f), S.Q. 262 (Butterworths).

168. R.R.Q. (1981), c. Q-2, r. 162, S.Q. 265 (Butterworths).

of Environment on the project, conditions to impose, and further research or studies.¹⁶⁹ This advisory role on the Review Committee appears to be the most significant set of rights granted the Cree under the Québec Environmental Quality Act. Yet because the Cree appoint only two of the five members of the Committee, with the other three appointed by the Québec government, it is a most limited concession.¹⁷⁰ In addition, the Minister need not follow the recommendations of the Review Committee.¹⁷¹ Moreover, notwithstanding the provisions for assessment, the entire LaGrande complex at James Bay was statutorily exempted from the assessment and review procedure described in the Act.¹⁷²

B. Canadian Federal Framework

1. National Energy Board

In Canada, electricity exports are regulated by the Canadian National Energy Board (NEB or Board). At the time of the CMP-Hydro-Québec contract, the NEB was limited under the 1959 Act of Parliament creating the Board to two factors in its consideration of an application for an electricity export license:

- 1) power to be exported must be excess to Canadian needs,¹⁷³ and
- 2) the price charged must be in the public interest.¹⁷⁴ Under NEB regulation adopted to implement the 1959 National Energy Board Act, power exports from Canada had to be at prices reasonably close to that of alternative power and energy available to the purchaser, typically a coal plant proxy.¹⁷⁵

When Canada Bill C-23 went into effect in June 1990, the powers of the NEB declined. The new law does away with the guarantee of public hearings, and any applicable federal environmental protections, in what is likely an unconstitutional delegation of powers from the federal to the provincial government.¹⁷⁶ Under Bill C-23, the NEB defers to the affected provinces consideration of the impacts of the export on the environment. Since Québec has only a cursory framework for dealing with

169. *Id.*

170. R.R.Q. (1981), c. Q-2, r. 151, S.Q. 261 (Butterworths).

171. R.R.Q. (1981), c. Q-2, r. 164, S.Q. 265 (Butterworths).

172. R.R.Q. (1981), c. Q-2, r. 209, S.Q. 277 (Butterworths).

173. National Energy Board, Regulations for Carrying into Effect the Provisions of Part VI of the NEB Act § (6)(2)(w) (1986) [hereinafter NEB Reg.].

174. NEB Reg. § (6)(2)(z).

175. NEB Reg. § (6)(2)(z); U.S. GAO CANADIAN POWER IMPORTS, *supra* note 64, at 27-30.

176. See discussion concerning the *Oldman* decision, *infra* notes 183-86 and accompanying text,

the environmental impacts of energy-related development, the NEB has in practice waived the environmental assessment requirement.

2. Federal Environmental Assessment Review Process

In Canada, two distinct legal entities can prompt environmental impact assessments: the federal government or a province.¹⁷⁷ However, responsibility for producing environmental statements for the various sectors of the Canadian government is a gray area, with many shared jurisdictions, joint ventures and waivers among the provincial utilities, the provincial governments, and the federal government.¹⁷⁸ Although, as described below, the federal courts have recently required environmental impact assessments where the federal government has jurisdiction, there remain many deficiencies in the process.

Until recently, there was no Canadian federal statutory requirement that an environmental impact statement be prepared for a hydroelectric project. The federal Cabinet adopted the federal Environmental Assessment Review Process (EARP) in 1973, amended it in 1977, but until the Cabinet codified it as an Order-in-Council in 1984,¹⁷⁹ this review process was policy rather than a declaration of law, precluding litigation and providing no legal recourse of appeal such as that available to U.S. citizens through NEPA. Thus, until codification in the form of a Guidelines Order, Canadian courts virtually have been closed as an avenue to redress inadequate evaluation of development projects.¹⁸⁰ Likewise, clarification of the applicability of the EARP has only recently begun.

Two recent cases, *Friends of the Oldman River Society v. Canada Minister of Transport*¹⁸¹ and *Canadian Wildlife Federation v. Canada Minister of the Environment*,¹⁸² make clear that the Guidelines Order is binding upon the Minister of the Environment and upon the Ministers of other departments. In *Oldman*, the Canadian Supreme Court held that the duty under the EARP of the Minister of Transport to take into account the environmental impact of a project is supplemental to the Minister's responsibility under the Navigable Waters Protection Act. The

in which the Supreme Court held that the federal EARP Guidelines Order requiring an environmental assessment is mandatory.

177. *Long-Term Threats*, *supra* note 164, at 4.

178. *Id.*

179. *EARP Guidelines Order*, *supra* note 62 at 2794.

180. *Long-Term Threats*, *supra* note 164 at 5.

181. [1992] 88 D.L.R.(4th) 1.

182. [1989] 3 F.C. 309 (T.D.), *aff'd* (1989), 99 N.R. 72 (F.C.A.).

objective of the Guidelines Order is “to make environmental impact assessment an essential component of federal decisionmaking.”¹⁸³ Thus, the independent environmental review outlined by the EARP is mandatory.

The *Oldman* court, refusing to accept the government’s argument that the concept of the environment is confined to the biophysical environment alone, acknowledged the importance of the principle of integrated economic and environmental planning, referring to the Brundtland Report of the World Commission on Environment and Development (WCED).¹⁸⁴ The court noted that the Canadian Council of Resource and Environment Ministers, in its Report of the National Task Force on Environment and Economy, stated:

Our recommendations reflect the principles that we hold in common with the World Commission on Environment and Development (WCED). These include the fundamental belief that environmental and economic planning cannot proceed in separate spheres. Long-term economic growth depends on a healthy environment. It also affects the environment in many ways. Ensuring environmentally sound and sustainable economic development requires the technology and wealth that is generated by continued economic growth. Economic and environmental planning and management must therefore be integrated.¹⁸⁵

The court continued, “[S]urely the potential consequences for a community’s livelihood, health and other social matters from environmental change are integral to decision-making on matters affecting environmental quality”¹⁸⁶

In 1989, a Saskatchewan court quashed a construction license for an almost completed dam project and ordered the federal Minister of the Environment to comply with the EARP Guidelines Order, setting an important precedent for James Bay.¹⁸⁷ The Minister had issued the license under the International Rivers Improvement Act in 1988. The federal appeals court in *Canadian Wildlife Federation* rebuked the Canadian government for failing to conduct its own environmental review of the dam project. The court said the government had not enforced its own regulations, relying on the plain meaning of the text of the Guidelines

183. *Friends of the Oldman River Soc’y v. Canada (Minister of Transp.)*, [1992] 88 D.L.R. (4th) 1, at 24.

184. *Id.* at 22. See *supra* notes 4-20 and accompanying discussion of WCED.

185. *Id.*

186. *Id.*

187. *Canadian Wildlife Fed’n v. Canada (Minister of the Env’t)*, [1989] 3 F.C. 309 (T.D.), *aff’d* (1989), 99 N.R. 72 (F.C.A.).

Order and the legislative intent in concluding that the Guidelines are mandatory.¹⁸⁸

One reason for the past uncertainty as to whether the EARP is mandatory has been that it is codified in the form of a Guidelines Order that lacks any explicit statutory enforcement or penalty mechanism.¹⁸⁹ However, the Oldman Court stated that because the regulatory scheme is law, it may be enforced through prerogative relief.¹⁹⁰ Stated otherwise, Parliament has delegated its authority to the Minister who has authority to issue directives having the full force of law.¹⁹¹ As to its scope, the EARP Guidelines apply to any proposal requiring "an initiative, undertaking or activity for which the government of Canada has a decision-making responsibility."¹⁹² If the proposal would produce significant adverse environmental impacts, or if the potential adverse environmental impacts that may be caused by the proposal are unknown, or if public concern about the proposal is such that a public review is desirable, the department with decision making authority is to refer the proposal to the Minister of the Environment for public review.¹⁹³

Notwithstanding the mandatory nature of the Guidelines, where a Canadian government entity has a regulatory function with respect to a proposal, the Guidelines apply to the entity "only if there is no legal impediment to or duplication resulting from the application of the guidelines."¹⁹⁴ Thus, while the Court has ruled that the Guidelines Order may be enforced, it also has acknowledged that any "legal impediment", undefined in the statute, may curtail their application.¹⁹⁵ Presumably, the existence of the James Bay Treaty could be such an impediment.

A flaw in the Canadian environmental assessment process is that, unlike the United States process of preparing an environmental impact statement, no consideration of alternatives is required.¹⁹⁶ In addition, projects are examined individually, with no provision in the statute for taking into account the cumulative impacts of all the projects proposed. Further, while the scope of the public review of a proposal may include

188. 99 N.R. 72, 73-74 (F.C.A.).

189. ROSENTHAL & BEYEA, *supra* note 24, at 23. See *EARP Guidelines Order, supra* note 62.

190. See *Friends of the Oldman River Soc'y v. Canada (Minister of Transp.)*, [1992] 88 D.L.R.

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191. *Id.*

192. *EARP Guidelines Order, supra* note 62. See also *Friends of the Oldman River Soc'y v. Canada (Minister of Transp.)*, [1992] 88 D.L.R. 1.

193. *EARP Guidelines Order, supra* note 62, at 2798.

194. *Id.* at 2796.

195. See *Friends of the Oldman River Soc'y v. Canada (Minister of Transp.)*, [1992] 88 D.L.R.

1.

196. Grand Chief Matthew Coon Come, *supra* note 42.

the general socio-economic effects and the need for the proposal, such a review will only take place subject to the approval of the Environment Minister and the Minister of the decisionmaking department.¹⁹⁷

Finally, the public review component of the Guidelines appears to be only for palliative effect. Witnesses are not to be sworn or subpoenaed.¹⁹⁸ The review panel need not accept the relevance of any information submitted to it.¹⁹⁹ As the Guidelines are written, neither are public hearings always required by the review process.²⁰⁰ The Guidelines state that where environmental regulation takes place independently of the federal review process, duplication of public reviews is to be avoided.²⁰¹ Joint federal/provincial review may be negotiated.²⁰² Thus, there is no guarantee that the public has meaningful input and participation in decisions concerning the environment under the federal review process.

VIII. UNITED STATES-CANADA FREE-TRADE AGREEMENT

The primary provision of international law that relates to the James Bay developments is the United States - Canada Free-Trade Agreement (FTA).²⁰³ It is beyond the scope of this paper to assess how aspects of international law other than the FTA could apply to James Bay developments. It should be noted that the international community is becoming involved in the Hydro-Québec controversy. For example, the International Water Tribunal in Amsterdam, a foundation financed by several European nations, held hearings in February 1992 on the Hydro-Québec proposal.²⁰⁴

197. *EARP Guidelines Order*, *supra* note 62, at 2799. Paragraph 25 (1)(b) provides for an examination of the directly related social impacts of the environmental effects.

198. *Id.*

199. *Id.*

200. *Id.*

201. *Id.* at 2795.

202. *Id.*

203. The text of the FTA is published in 27 INT'L LEGAL MATERIALS 293 (1988). See also United States - Canada Free-Trade Agreement Implementation Act of 1988, Pub. L. No. 100-449, 102 Stat. 1851 (1988). In general, with respect to energy, the world's nations have been slow to realize their common interest in the environmental problems related to energy policy. See CALDWELL, *supra* note 4, at 191-193. Although Canada has been in the forefront of the acid rain issue, pressuring the United States to abate the problem, it has not given much attention to problems of deforestation and flooding of the northern forest, which are also matters of international consequence. For an analysis of how international case law, various doctrines, conventions, and treaties might possibly apply to the purchase of electricity from Hydro-Québec by the New York Power Authority, see Ian M. Paregol, Comment, *Shocking Revelations at Hydro-Québec: The Environmental and Legal Consequences of the Québec-New York Power Line*, 7 DICK. J. INT'L L., 155 (1988).

204. Dennis Bueckert, *James Bay Faces International Hearings*, GLOBE AND MAIL, Jan. 6, 1992, at B1. Although not legally binding, the Tribunal's verdicts are widely reported in Europe and elsewhere. *Id.* While recognizing that Hydro-Québec and the provincial government had entered into agreements with the Cree people, the Tribunal questioned whether the contracts adequately

The rules of the FTA contemplate substantially tariff-free trade between the two countries with neither non-tariff barriers to foreign goods nor domestic subsidies, yet the rules are less than clear when applied to environmental regulations that effectively bar foreign goods.²⁰⁵ Concern for the ecological dimensions of a free trade policy was not foremost in the drafters' minds. There is a struggle to reconcile not only trade and environment, but also traditional concepts of sovereignty and changing standards of international conduct.²⁰⁶

An analysis of the FTA by Canadian environmental organizations in 1988 concluded that the FTA would likely have disastrous consequences for the environment and would fundamentally undermine principles of environmental protection and sustainable resource management.²⁰⁷ Indeed, since the implementation of the FTA, two of the largest energy projects in Canadian history have received export licenses: the Mackenzie Delta natural gas development and associated pipeline and the James Bay hydroelectric development in Northern Québec. The FTA narrows the circumstances in which a country may use regulatory devices that could control the development of energy resources for export markets.²⁰⁸ It also abolishes the right under the General Agreement on Tariffs and Trade rules to use export taxes as a mechanism for resource management and conservation.²⁰⁹

Although electricity was already in many ways a free trade area, the passage of the FTA in 1988 clearly curtailed the Canadian government's ability to impede hydroelectric development for energy export.²¹⁰ Prior to passage of the FTA, Canadian utilities had to structure their rates so

reflected Cree aspirations for self-determination and control over natural resources. Ronald Van der Krol, *Business and the Environment; Tribunal Flexes its Muscles*, FIN. TIMES, Feb. 26, (1992), at 114.

205. Stephen L. Kass and Michael B. Gerrard, *International Trade*, N.Y. L.J., Jan. 24, 1992, at 3.

206. *Id.*

207. Steven Shrybman, *Selling the Environment Short: An Environmental Assessment of the First Two Years of Free Trade Between Canada and the United States*, 2 (1991) (CANADIAN ENVIRONMENTAL LAW ASSOCIATION).

208. See FTA Art. 904, 27 INT'L LEGAL MATERIALS 344 (1988).

209. Compare General Agreement on Tariffs and Trade, Oct. 30, 1947, U.S.-Canada article XX(g) [hereinafter GATT], allowing trade restrictions for the purpose of the conservation of exhaustible natural resources, with Bill C-130, implementing the FTA in Canada, which compels the National Energy Board (NEB) to issue an export license even in the face of shortages. See also Shrybman, *supra* note 207. Now, although terms and conditions may attach to an NEB license, the NEB cannot withhold approval for environmental reasons. *Id.*; Québec v. Canada (Nat'l Energy Board), [1991] 3F.C. 443, 444 (F.C.A.) ("Authorities other than the Board are responsible for the serious environmental questions raised by the construction of electrical energy production facilities.").

210. ROSENTHAL & BEYEA, *supra* note 24, at 25-26. See *supra* part VI.B.I.

that they would not be below the least-cost alternative in the United States²¹¹ The National Energy Board also had to make a determination that the granting of a particular energy export license would be in Canada's best interest.²¹² When challenged and faced with pressure from United States business interests, the NEB recently abandoned virtually all of its regulatory authority and ruled that it would only examine proposed energy export contracts for "commercial substance" and "would generally presume that where contracts are freely negotiated at arm's length, they are in the public as well as the private interest" and that the Board would intervene only in exceptional circumstances.²¹³ Now, a Canadian utility may set its rates regardless of the United States competitor's prices.²¹⁴

The possibility that Québec might break away from the rest of Canada raises questions about the province's ability to participate in the FTA as a separate entity. A Québec commission set up to study Québec's future relationship with Canada concluded that the province would be required to seek membership as a separate entity.²¹⁵ Authorities disagree as to whether Québec's economic relationship with the United States would be damaged.²¹⁶ The Québec government's interventionist stance in its economy might not be so acceptable if Québec were an independent country.²¹⁷

It is also uncertain whether the northern two-thirds of Québec would accompany a secessionist Québec. The Assembly of First Nations maintains that any recognition of French-Canadian rights to promote and preserve identity must be matched by equally strong recognition of

211. NEB Reg. § (6)(2)(z), *supra* note 173.

212. *Id.* § (6)(2)(w); Shrybman, *supra* note 207 at 5.

213. Shrybman, *supra* note 202, at 5 (quoting NEB decision).

214. ROSENTHAL & BEYEA, *supra* note 22, at 26.

215. Daily Report for Executives (BNA) No. 62, at A-8 (Apr. 1, 1991).

216. *Id.*

217. *Id.* United States companies reacted to revelations that Hydro-Québec has contracts with industrial customers in Québec that provide for sales of electricity at less than market rates, by setting the anti-dumping and anti-subsidy provisions of the FTA into motion. See *About Business*, OTTAWA CITIZEN, Oct. 17, 1991, at C1. The United States International Trade Commission found that the United States magnesium industry suffered as a result of a Québec competitor's imports and the Commerce Department found the imports to be subsidized by cheap power from Hydro-Québec. *Id.* Reportedly, Hydro-Québec expected to lose money on its 25-year Norsk-Hydro contract when it negotiated the deal. Graeme Hamilton, *Hydro Expected Loss on Norsk Deal: study; Québec Utility is Target of Probe by U.S. Commerce Department*, THE GAZETTE (Montreal), Jan. 17, 1992, at A5. On July 7, 1992, the United States Commerce Department recommended that magnesium imports be subject to duties totalling 53% for unfair trade practices. John Saunders, *Canada Loses Another Trade Row*, GLOBE AND MAIL (Toronto), July 8, 1992 at B3.

First Nations' rights to promote and preserve aboriginals' identities.²¹⁸

In considering alternatives to the FTA that would encourage sustainable development, one has to ask how trade rules should operate in order to protect natural resources. Since the availability of natural resources is finite, the use of natural resources should be conservative. But under the current free trade rules, laws that protect the environment can be seen as barriers to trade. If the rules of free trade were to treat natural resources as finite, then wholesale exploitation the environment leading to serious deterioration of natural resources would be viewed as unfair borrowing against future generations. Thus, under an enlightened view of the principles of the FTA, unsustainable use of natural resources for short term profit would represent an unfair subsidy and would be outlawed.

IX. CONCLUSION

The assessment of United States utilities that Canadian hydropower is clean can only have come about because its primary effects are far removed from the experience of United States citizens and regulators. The lack of a legal requirement in the United States that a government authority examine and justify the effects in Canada of the importation of electricity has allowed this claim to go virtually unchecked by utilities.

Of all the decisions that affect the environment, energy choices have the potential to have the greatest impact. A complex maze has developed in the form of international agreements, various federal and state laws and regulations. Many purport to consider the environmental impacts of government decisions. Yet, the decision-making process around energy matters does not take into account the full environmental consequences of those decisions. Problems of ozone depletion, climate change, and acid rain have yet to be addressed. Equally important, energy policy-makers have not adequately considered the foremost concerns of people who are most directly affected by energy decisions. A concept of environmental quality confined to the biophysical environment is unduly narrow and contrary to common understanding. After all, consequences for a population's livelihood, culture, and future well-being are integral to an accurate concept of environmental quality.

As they have been implemented, United States and Canadian laws

218. See William Johnson, *Mercredi Cannot Understand Why Québec Is So Hostile*, THE GAZETTE (Montreal), Mar. 7, 1992, at B3. Further, since the territories of the First Nations cover most of Québec, it cannot be presumed that the present boundaries of the province would automatically be those of a sovereign new state.

that form the framework for Hydro-Québec imports are deficient in that they do not adequately weigh the environmental and social consequences of the hydroelectric development at James Bay. In the United States, while many of the applicable laws and regulations could be interpreted to consider the global impacts of development and include the goal of sustainable development, the affected government agencies and many courts are not ready to do so. A remedial legislative approach is needed to strengthen the framework.

Legislation at the state and federal levels must require specific consideration of the global environmental impacts of energy decisions. It is our own future that is at stake in this environmentally connected world. Assuming we have moved into an era of a global economy, new provisions must be built into our laws to integrate economic and environmental planning. A broader interpretation of concepts like "least cost" and "public interest" is needed. Planners and regulators should at least attempt to look at whole ecosystems when assessing the impacts of development.

In addition, more emphasis is needed on the importance of giving citizens full access to information which can facilitate their understanding of the connection between individual consumption decisions and the global impacts of those decisions. Then, even if we cannot prevent another nation from carrying out a policy contrary to the principles of sustainable development, at least we can make an informed decision not to encourage such destruction by participating in the making of its profit.

